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HEADQUARTERS FOR LP-GAS

1947

I.Y.

News

Technology

SCAIFE SCAIFE

SCAIFE LP-GAS

CYLINDERS

oc SCAIFE COMPANY

Oakmont (ALLEGHENY COUNTY), Pa.

NOVEMBER, 1947



### on CYLINDERS

That's right! Your investment in cylinders should be considered from the standpoint of years. In buying Hackney L-P Gas Cylinders you are buying advantages that save you money year after year.

Although extremely rigid and strong in construction, Hackney Cylinders are lightweight. This means repeated economies throughout the long lives of these sturdy Hackney Cylinders. You repeatedly save money on maintenance, too. The finishing procedure less repainting; the "scalloped ring permits thorough inspection facilitates cleaning. Labor costs duced year in and year out.

So when you consider cylinde member you are making a long investment. Make certain you a ting the advantages that grow important with each year. For full details on Hackney L-P Gas Cylinders, write us.



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Manufacturers of Hackney Products

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CONTAINERS FOR GASES, LIQUIDS AND SOLI

THIS WOULD NEVER HAVE HAPPENED IF YOU HAD BOUGHT THAT BIG STORAGE TANK AND FILLED IT LIKE THE ANCHORGAS MAN SUGGESTED!



A name famous for highest quality Butane - Propane



**EXPORT DIVISION: ANCHOR OIL CO., HOUSTON, TEXAS** 

NOVEMBER - 1947

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### **CONTENTS NOVEMBER, 1947**

Letters	45
Comment	49
Guest Editorial: Cooperation Pays Dividends	51
Tri-State Distributors Make Flying Their BusinessBy Ed Titus	58
Home Storage For the Rice Grower By Zoe Johnson	61
LP-Gas Takes to Air By O. D. Hall	64
Coastwise Tanker Will Haul Propane to East Coast	68
Kansans Sold On Large Consumer System	70
It's Chicago in '48 Says the NBPA	71
1946 Sales of LP-Gas Increase 34%	76
Salt Lake Plays Host to LPGA Guests	87
Where and How to Fill Consumer TanksBy O. L. Garretson	90
Something New: LPGA Will Hold Consumer Show with 1948 Con-	
vention	
Calendar	
	104
Partners: Manufacturers & DealersBy L. A. Brand	
The Liquid That is Gas	122
Pennsylvania Distributors Open De- luxe Showroom By George E. Toles	129
New Products	132
Power: Adapting Natural Gas Engines to Butane	140
New Carburetor by Century Now on Automotive Market	148
Earnest LP-Gas Men Fight Heat To Learn Basic Information	
What the Farm Market Means to Butane Propane Dealers By Bob Johnson	
Gas Men Prepare Model Code for Appliances	160
The Trade	162
What Gas-Powered Engines Mean to Farms	177
Classified	
Advertisers	192

# BUTANE-PROPANE News

Reg. U.S. Pat. Off.

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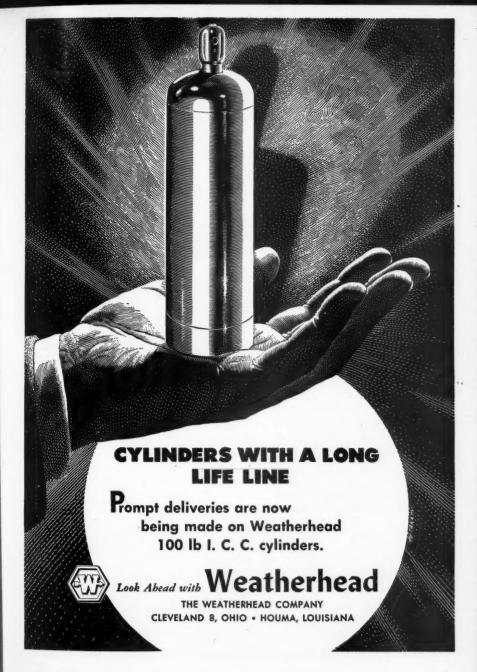
DALLAS (8), TEXAS—2411 Nicholson Dr. Phone Yale 2-9455 ROBERT B. FARSON, Manager

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Vews

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THESE ARE SOME OF YOUR PROSPECTS

SM More than 25

Country Tavorus Ranches

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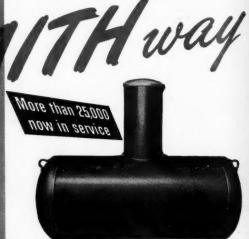
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The SMITHway Combination LPG System meets or exceeds all safety codes . . . is double-inspected by an independent licensed insurance inspector. It is more dependable because, in manufacturing, A. O. Smith uses procedures and standards heretofore reserved for the most exacting industrial products.\*

Built for years of trouble-free service, it requires a minimum of maintenance... pays for itself in a short time.

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The A. O. Smith Corporation manufactures Permaglas LPG Water Heaters with microrsmooth tanks of sparkling blue glass-fused-to-steel. They CANNOT rust or corrode!



### THA APPROVAL

SMITH way Combination 1,PG Systems can be approved for FEA inancing in most all cases . . . for replacements, additions, or completely new installations. Check your local FHA office for the details.



\*MAKERS OF AUTO FRAMES, PRESSURE VESSELS, LINE PIPE, OIL-WELL CASING, BREWERY TANKS.



### Gas Refrigeration's New Advertising Portfolio will help you meet the challenge to the Gas Industry

Yes, 1948 is the year of challenge. The Gas Industry—along with every other American company, salesman, and product—has been challenged to produce more... to sell more. For only by increased production and selling can we build a healthy, durable prosperity.

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"Easy selling" is coming to an end. There will be keen competition for countless prospects who are waiting to be sold. To get your share of this market, you must roll up your sleeves, plan an aggressive local sales program . . . and then put it to work.

That's just what this new Advertising Portfolio will help you do. It offers a complete promotional program . . . planned step by step under one cover:

Local Advertising Materials
Displays and Signs
Direct Mail and Literature
Retail Salesmen's Aids
Home Service Materials
Salesman Selection and Training

Write Servel, Inc., Evansville 20, Ind.

Servel The GAS Refrigerator





# ... METERS STRENGTHEN YOUR

EACH CUSTOMER

Cor able a. T P

LP Gas is sold without meters, that's true, but metered LP Gas builds long term customers for long term profits.

Correct meter utilization enables profitable service routing:

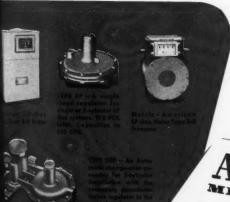
- a. Takes care of more customers per day
- Reduces the high cost of special deliveries and the number of "out of gas" complaints.

Incentive sliding rate schedules sell more appliances and more gas and return an even flow of revenue.

Multiple customers may be individually metered from the same tank or cylinders.

On rental homes, metering makes it simpler to check old tenants out and new tenants in.

You can find several additional reasons of your own for metered service.



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METER COMPANY

AND ARIANTA - MARINE - COMPANY

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WRITE FOR FULL INFORMATION

Large capacity meters are available for commercial and industrial installations.

Depend on RELIANCE REGULATORS, another American Meter product noted



NOW... A.G.A. APPROVED
NEW IMPROVED ALL ALUMINUM
PORT-O-STOVE
Patent Pending

Don't confuse the Port-O-Stove with any other two-burner hot-plate. Look for the A.G.A. Seal of Approval on the nameplate.

Designed Especially for L. P. Gas

Guaranteed against mechanical and material defects. Write for particulars today!

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The Best Buy in L. P. Gas

### QUALITY YOU CAN SEE!

All Buehler L. P. Gas Plants are built to ASME and API-ASME Code requirements, Buehler tanks, spheres and bottles come to you with the finest of workmanship inside and out. No poor threads to cause leakage. No inferior fittings. No rough edges to cut your hands and no water in the tank. You get plus value in service too whether you are an LPG Dealer in Maine or California.

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This All-New Revolutionary Post-War

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**Branch Offices:** San Francisco, Dallas

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We rope our customers in with Price-Quality & Service
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Domestic Propane & Butane Systems

You Will Like the Appearance; You Will Like the Built-in Conveniences; Your Customer Will Like the Trouble-Free Service our Systems Give.

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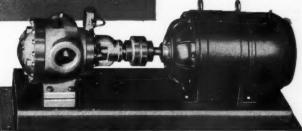


# DESIGNED SPECIFICALLY

### FOR PUMPING

L. P. GAS

Model M-2 direct connected to electric motor.



The special problems encountered in handling liquefied petroleum gases can be met safely only by a pump especially engineered for this service.

To assure yourself of satisfactory operation, get all the facts before you plan your installation. To assist our customers in this respect we have made available information regarding installation problems, by furnishing reprints of articles which we have been contributing regularly to Butane-Propane News.



### THERE IS A SMITH MODEL FOR EVERY L. P. G. SERVICE

Model M-1044: Capacity 20 GPM at 1800 RPM, direct connected to 1<sup>5/2</sup> HP explosion-proof electric motor.

Model M-2: Capacity 50 GPM at 1800 RPM, direct connected to 3 or 5 HP explosion-proof electric motor.

Model M-3: Capacity 100 GPM at 1800 RPM, direct connected to 5 or 7½ HP explosion-proof electric motor. Model T-1044: Capacity 20 GPM at 500 RPM, direct connecting to truck power take-off.

Model T-2: Capacity 50 GPM at 500 RPM, direct connecting to truck power take-off.

Model T-3: Capacity 100 GPM at 500 RPM, direct connecting to truck power take-off.

SMITH SPRECISION PRODUCTS COMPANY

1135 MISSION STREET . SOUTH PASADENA . CALIFORNIA . PHONE PYRAMID 12293

NOVEMBER - 1947

WS

17

# Now You Can Add...TWO To Your

HAMMEL . . . .



HAMMEL COMFORTAIRE

The Hammel Line offers a complete selection of vented space heaters, forced air units, gravity basement furnaces plus a wide range of wall heaters. All Hammel appliances are fully welded and finely finished. They are the result of over 35 years of progressive development and manufacturing. The Hammel Comfortaire, illustrated here, offer these features:

- 1—Silent, blower type central heating plants with filtered intake air.
- 2-Fully guaranteed.
- 3-All A.G.A. approved.
- 4-Decorative -Safe.
- 5—Produced for L.P.G., natural, or manufactured gas.
- 6-All types of controls available.

The Utility Supply Company proudly presents the addition of these two outstanding lines of heating equipment to their complete line of Gas Supplies.

Write, Wire or Phone for Descriptive Literature.

# "BEST SELLERS" Appliance Line

UNIVERSAL . . . .



UNIVERSAL HEATMASTER

UTILITY SUPPLY COMPANY now has representatives in Kansas City, Los Angeles, and Tulsa. For complete information write the home office in Fresno, California,

The Universal Line of furnaces are designed to simplify all installation problems for the LP-Gas dealer. They are expertly engineered and built to yield a maximum of economic efficiency. This line now offers: wall furnaces (38,000 and 45,000 btu) for any standard 4 in. stud wall . . . . also floor furnaces, dual or flat (25,000 to 60,000 btu). All L.P.G. equipmen has fully automatic pilot, 100 per cent shut off. Thermostatic controls are available if desired. Features of the Universal Heatmaster, illustrated here, include:

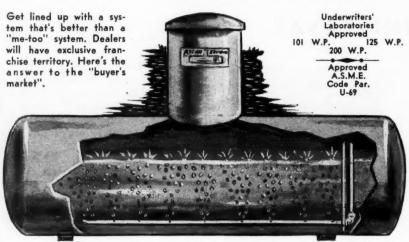
- 1—Shallow (26 in. depth)
- 2-Sizes from 25,000 Btu, to 60,000 Btu.
- 3—All A.G.A. Approved.
- 4—Has 10 year guarantee.
- 5-Produced for L.P.G., natural, or manufactured gas.
- 6-All types of automatic controls available.

# UTILITY SUPPLY COMPANY

2123 INYO STREET Phone: 26189

FRESNO, CALIFORNIA

# NOW! FABRICATORS AND DISTRIBUTORS Here's An Exclusive Franchise!



# \*AGI-GAS HAS EVERYTHING Plus 6 Big, Exclusive Features!

- Proven by tests to have 20% more efficiency than the conventional type systems.
- Constant agitation; no heavy ends on bottom.
- Fewer service costs because gases are kept thoroughly mixed.
- An even blend of gases at all times.
- Gives better storage capacity.
- Sold only through exclusive franchised dealers.

**DEALERS:** Write AGI-GAS Corp., for name of nearest distributor.

\*U.S. Pat. No. 2,211,005

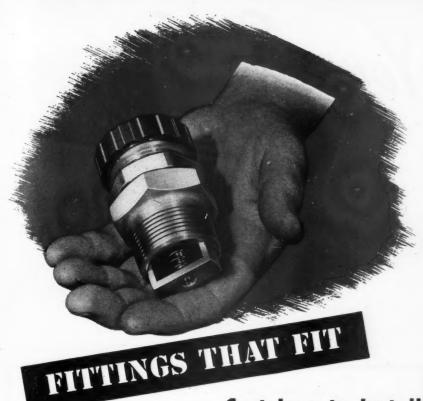
## AGI-GAS SYSTEMS

ABOVE GROUND AND UNDERGROUND

AGI-GAS CORPORATION

P. O. BOX 2047

TULSA 1, OKLA.



# . Cost Less to Install

TANK BUILDERS-Speed up your production. Eliminate leaks and costly reworks with fittings that fit. Fittings precision built and inspected to extremely close tolerances to insure perfect thread engagement.

Selwyn-Landers Fittings for every LPG need are ruggedly designed with extra strength at the critical points for safety and dependability.



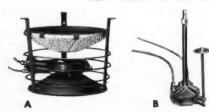
"BETTER FITTINGS IMPROVE YOUR PRODUCT"

## SELWYN-LANDERS

COMPANY

4709 East Washington Blvd., Los Angeles 22, Calif. Designers and Manufacturers of L.P.G. Equipment You're Right-You're Seeing

### The "Heart" of the HUDSON-HART GAS BROODER



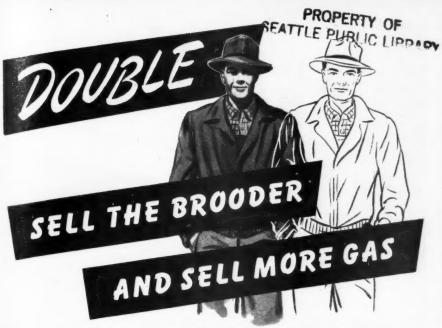
- A. Economy unit with single burner and single pilot light. Special clay radiants reflect infra-red heat to every chick under brooder.
- B. Carefree regulation assured by Hart thermostat and sensitive accurate valve.



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7ested and Proved H. D. HUDSON

589 E. Illinois St., Chicago, III., U.S.A.



When you talk to a prospect about the Hudson-Hart Gas Brooder, don't think only of the profit you'll make on the brooder. Think, too, of the extra gas sales you'll make this year and for the long life of the brooder. Then sell—and sell hard. It's worth it!

Just check the "reasons to buy" a Hudson-Hart: AUTOMATIC, work-free, time-saving brooding... DEPENDABILITY in coldest, stormiest weather... ECONOMY. Make every possible sale—have several on hand well before the brooding season begins.

### HUDSON PRE-SELLS YOUR PROSPECTS

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BE READY—ORDER NOW
Make every possible sale—
have Hudson-Hart Brooders on hand before the
brooding season begins.
Write, wire or phone Hudson for full information.

Equipment for the Farm of Today
MANUFACTURING COMPANY

Branches in Principal Cities in the U. S.



Heads for LP-Gas cylinders, storage tanks, transport trucks and other equipment—Lukens can ship many sizes from stock and make prompt delivery on others, 96" O.D. and under. Hundreds of dies are available to form all types of materials... carbon and alloy steels; and the widest range of clad steels available anywhere.

If your production plans call for larger heads, write us for shipping schedules. At present, we spin heads to over 18' O.D. In the near future, new equipment will be ready to produce still larger sizes.

Essential Data on 3,868 Standard Heads

Every designer of equipment using heads should have this valuable book. It lists 3,868 heads of standard sizes, shapes and materials, also manhole, handhole and fluehole flanging and

much other valuable data. Write on your letterhead for "Flanging and Pressing"... the most complete book of its kind published. Lukens Steel Company, 422 Lukens Bldg., Coatesville, Pa.





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The American RED READ

well proportioned, streamlined

the modern I.p. gas system

The RED HEAD'S distinctive appearance is easily identified and marks it as the outstanding L.P.Gas system in the field. It's a beauty you'll be proud to have as part of your L.P.Gas installation.

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Built into every shipment of

# Sinclair L.P Gases

is the reputation of Sinclair...
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Sinclair sells Propane only wholesale...does not compete with its customers.

Keep us in mind for the day when increased supplies will permit us to serve new customers.

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SINCLAIR BUILDING, TULSA, OKLAHOMA
LIQUEFIED PETROLEUM GAS DIVISION



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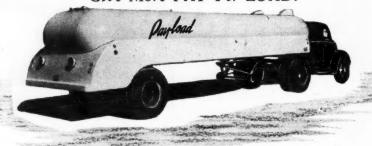
Payload W-68

U-68 LIGHT WEIGHT MODEL

(10% Lighter in Weight)

DELIVERY and TRANSPORT TRUCK TANKS

Give More PAY Per LOAD!



THE NEW U-68 MODEL is finished with easy-rolling, lighter weight STANDARD FORGE Axle Unit, Brakes, Tires, and Landing Gear-available with or without the Tandem Axle Unit. Write Goday!

With Payload It's

LESS REPAIRS

LIGHT WEIGHT

STRONGER BODY

GREATER Tire MILEAGE

Stress Relieved — X-Rayed

**Automatically Welded** 

SOUTHLAND STEEL CO., INC.

5219 Maple Ave.

Dallas, Texas

BUTANE-PROPANE News

# "SALES AT NEW PEAK" ... Thanks to Better-Made BS&B Propane Systems

Live-wire BS&B dealership, managed by E. G. Riley, reports real satisfaction with the serviceability and saleability of BS&B Propane Systems.

を作るでする。近日は大きのでは、日本のではのでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、日本の

ews

"We're sold on Black, Sivalls & Bryson Domestic Propane Systems. They offer our customers sturdy, trouble-free storage. And the

big BS&B Merchandising Plan makes our job easier. Radio, farm paper, and local dealer tie-in advertising spreads the word about Propane. Our sales have been at a record peak, and BS&B Systems are an important factor."

Thank you, Mr. Riley. BS&B knows that a top quality product, properly merchandised, can be a real profit producer.

Several valuable dealerships remain open. Write today for full details. Address: Propane Gas Equipment Division, Black, Sivalls and Bryson, Inc., Power and Light Building, Kansas City 6, Missouri.





Bob-tailed delivery truck and twin-barrel tra port assure Rapid City area of rapid, effici Propane service.



FOREIGN INQUIRIES INVITED



Cable Address: BLACK, KANSAS CITY, U.S.

BLACK, SIVALLS & BRYSON, INC.

KANSAS CITY, MO.



KLAHOMA CITY, OKLA

## \* McNamar

...a name written in LP-Gas Profit Ledgers\_

"A Name that Stands for Quality"

L-P GAS STORAGE VESSELS

McNamar Storage Vessels . . . 6,000 gallons to 30,000 gallons, (constructed of construction). McNamar Storage Vessels ... 6,000 gallons to 30,000 gallons, (constructed of quality high tensile steel, ASME Code of construction) ... are outstanding with many of the LD Cos Inchusers all shreamsh the country! Dealers COLING. of quality high tensile seed, ASME Code of construction). are outstanding with men of the LP.Gas Industry all through the country. Dealers COUNTS and the archive of McNamure Surface share own EVTD & DIVIDENTS. with men of the LP-Gas Industry all through the country! Dealers COUNT on the exclusive features of McNamar Systems that pay EXTRA DIVIDENDS

on Storage Tank Investments.

6,000 — 7,000 — 12,000 Gallon Systems 10 DAYS DELIVERY 18,000 Gallon - 30,000 Gallon 3 WEEKS DELIVERY

ALL/UNION-MELT-WELDING USED AT MCNAMARI

OR MORE INFORMATION

. LP-Gas Systems .

P. O. Box 868

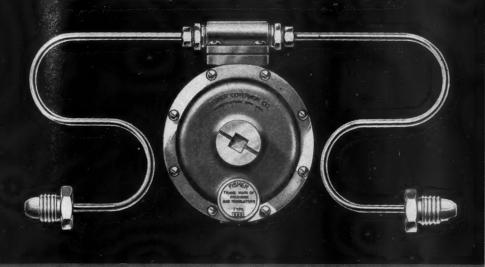
Tulsa, Oklahoma

McNAMAR BOILER and TANK COMPANY

### Type 923 Regulator

Two Cylinder Integral Check Valve Manifold Assembly FISHER

TRADE MARK OF PRECISION GAS REGULATORS



THE FISHER TYPE 923 is designed for two cylinder installations where a compact economical assembly is important, but where superior regulation and control must be maintained. This assembly consists of the Type 922 main regulator and a double acting Check Valve built as an integral part of the regulator inlet, complete with two pigtails. This eliminates separate manifold. Regulator end of pigtails are 1/4" inverted flare connection. Cylinder end POL.

### **SPECIFICATIONS**

Capacity—100 cu. ft. per hour or more, Reduced Pressure — Standard setting 11" water column.

Inlet Connection — Inverted flare. Pigtails supplied have inverted flare at regulator. POL, No. 968 or No. 982 at cylinder end. Outlet Connection—1/2" female pipe thread. Relief Valve—Built-in, set for 1 lb.

Body, Cover and Manifold Casting—Die cast.

Finish - Iridite treated and hard lacquer finish.

Mounting—Two bottom feet with foot screws and washers.

Shipping Weight-5 lbs.

# FISHER GOVERNOR COMPANY MARSHALLTOWN, IOWA

Western Office: 2334 E. 8th St., Los Angeles 21, Calif. Eastern Office: 212 E. State St., Westport, Conn.

World's Largest Exclusive Manufacturer of Pressure Control Equipment



ABOVE and UNDERGROUND

LP-GAS TANKS

The world's finest Propane Systems

300, 500 and 1000 GALLON ASME U-69 200 PSI WORKING PRESSURE PROPANE TANKS

Battom Outlet Optional

\*\* Water Canacity



Completely fitted and incorporating the Underwriters Label on the System

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THE LARGEST MANUFACTURERS OF TUBULAR PRODUCTS IN THE WORLD

Markeled by

UNITED PETROLEUM GAS COMPANY

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Juguet 5, 1947

Dallas, Comb) cond

The Mitchell Vaporisor has many valuable features, and because of present production problems in the L.P.O. industry, those features have become of greater value and importance.

First in importance is the fact, that, at all tempera-tures, using Beams, Propage or any mixture thereof- the consumer is assured of a definite minimum B. T. U. delivery, based on the size of his vaporiser.

geoond in importance is the fact that at all tempera-tures and with any mixture of hisane and Prepans, he will get a fairly uniform Gas as regards the N.T.U. content, from the time his storage is filled until he has it refilled.

uninterrupted flow of gas at all times, and of such over D.T.J. on the content that his equipment will function in a fire and askiemontent that his equipment will function in the clealer, who
factory manners. And last but not least, to chealer, who
services this account it will mean the plinners adjustments or
services this account it will mean the plinners adjustments or
lack of vaportsation. And in the winter and especially during
lack of vaportsation, and in the winter and especially during
and inconvenience.

The cost of the veneriser is so little, and the in-stallation can be so easily made, that it should appeal to every consumer and every dealer, in any area where they have any severe winter meather.

Respectfully yours,

SUPERIOR MANUFACTURERS COMPANY

J. Cura Sales Engineer



Capacity-2 gals. per hour

the man knows!

# the man who sells and services the

OVER THE NATION, more and more of the men who sell and service LP gas equipment are coming to know the MITCHELL Vaporizer. They know already and appreciate the value of dependable, trouble-free gas service for their customers . . . they respect the MITCHELL units. The testimonial letter reproduced here is one of many sound examples of that respect for quality and dependability.

UNIFORM GAS. The MITCHELL unit assures the consumer of a uniform gas - a gas that has a constant BTU content from full

/APORIZER rdless weather or tank to empty rel

gas Mixture. MINIMUM SERVICE. Certainly of prime interest to the dealer is the MITCHELL Vaporizer's simple and efficient design.

The MITCHELL unit is dependable and requires surprisingly little service.

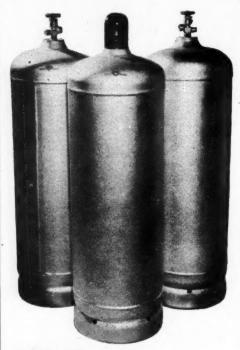
THE INDUSTRIAL UNIT In capacities from 30 to 120 gallons per hour, an efficient source of gas for schools, dehydration plants, tourist courts, drilling rigs, cotton gins, stand-by plants, and community gas



DALLAS, TEXAS

Send for Details Today

# REGULATION I. C. C. CYLINDERS



100-lb. size

Stress Relieved

•
X-Ray Controlled
•
Automatically
Welded

We manufacture everything for the L.P.G. Dealer in the pressure vessel line from 5-gal. cylinders to 30,000-gal. storage tanks—including domestic systems, cylinders, truck tanks, skid tanks, storage tanks and refinery equipment.

Manufacturers of
ASME-API-ASME Code, National
Board & Underwriter's Approved
Vessels

Inspected by
The Hartford Steam Boiler Inspection & Insurance Company



1612 Singleton Blvd.

Riverside 5241

Dallas 2, Texas



# RELIEF VALVES FOR WATER HEATERS

Correctly designed and built of the best materials to insure dependable service. Corrosive resistant construction. Pressure relief spring made from stainless steel. Other metal parts are of brass. Neoprene seat washer insures longest life with hot water.

No adjustments required—pressure relief set at factory—85—105—125 lbs. or as specified.

AGA LISTED

Write for information and prices.

THE W. J. SCHOENBERGER CO.

8810 HARVARD AVENUE

CLEVELAND 5, OHIO

# HERE'S A HAND PUMP



Now, at last, you can secure a hand pump for the transfer of small quantities of LP-Gas. Here is an easy-to-operate hand pump that any farmer can use whenever and wherever he desires. Designed specifically for the pumping of LP-Gas, the Harman Hand Pump is ideal for the transfer of butane or propane from the farmer's large storage to skid or tractor

> The Harman Hand Pump is light, safe, easy to handle. It will pump 6 to 10 gals. per minute; is good for 15 lbs. differential. Pump has I in, intake and discharge openings. Weight is 37 lbs.

AVAILABLE FOR **IMMEDIATE DELIVERY** 

This hand pump is easy to turn. Due to unique method of supporting sealing blades there is no sticking and a minimum of wear. This aids in ease of operation and adds to life of pump. Shaft is mounted on conventional bronze bearing.

## HARMAN PUMP COMPANY

1575 Compton Avenue

Los Angeles 21. California

Lines of DEPENDABILITY
From a House of Dependable Service

AMERICAN MERICAN MERICAN HEWITT HOSE



NEPTUNE METERS

Gas SOUTHERN Systems

GARLAND

COMMERCIAL RANGES









SOUTHERN GAS

BERRYHILL BLDG. SAPULPA, OKLA.



EQUIPMENT CO.

BRAHCHES — BHID, OKLA; ATLANTA, GA

TEXAS DIVISION - 4605 MONTROSE BLVD. - HOUSTON

# Here's One For Any Budget!

There is a Mutual Hot Plate to fit every budget. If your customer desires the finest, there is the Mutual DeLuxe. If efficiency is most important, sell the Stovette. For price only, there is the Thrift Plate. To increase holiday buying, investigate Mutual's complete line today.



THE MUTUAL STOVETTE is one of the most popular models available today. It is designed for persons desiring the maximum efficiency at a minimum cost. It has white baked enamel finish, removable drip pans. Height 41/2", length 18", depth 12".

THE THRIFT PLATE is a low price hot plate which attracts the low income buyer. It is built of cast gray iron, painted black. Has approved valves, tested burners, Height 6", length 19", depth 13".

THE MUTUAL UTILITY TABLE is available for immediate shipment. It is excellent for use in trailers, general kitchen utility and show room display. Constructed of heavy gauge steel, it is finely finished in white baked enamel. Shipped KD. Height 29½", width 14", length 21½".

For Mutual's complete line, write for Catalog, 995.



MUTUAL'S DELUXE 3-BURNER is a finely tooled hot plate that will appeal to the most particular customer. It's beautiful, rugged and performs superbly. You can't offer a finer hot plate. Height 5", length 29", depth 12".

THE MUTUAL DELUXE 2-BURNER is an adaptation of the quality 3-Burner. It is for persons who need a smaller cooking unit but desire the finest in hot plates. Height 5", length 20", depth 12".



LIQUID GAS EQUIPMENT CO., Inc. 3600 WEST IMPERIAL HIGHWAY, INGLEWOOD, CALIF.



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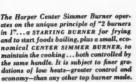
## We're telling 21,500,000 women about the many advantages of—

- 1 COOKING WITH MODERN GAS RANGES
- 2 BUYING RANGES EQUIPPED WITH HARPER CENTER SIMMER BURNERS

LAST YEAR we started a modest program of educational advertising in leading national magazines read by 21,500,000 women who are excellent prospects for higher-priced ranges.

Comparatively inconspicuous, these small advertisements brought an overwhelming number of requests for more information about the Harper Center Simmer Burner. As a result, this consumer program has been expanded. Full column advertisements like the one shown here are now appearing regularly. They describe the advantages of buying a Harper equipped range, and offer a free booklet, "Modern Methods of Top Burner Cooking," on request.

A FREE booklet, "How to Sell More Gas Ranges," enables dealers to tie-in effectively with this advertising. It contains a series of quick, convincing sales floor demonstrations illustrating the superiority of the Harper Center Simmer Burner. Send for copies for your salesmen today! Harper-Wyman Company, 8563 Vincennes Avenue, Chicago 20, Illinois.







### HARPER CENTER SIMMER BURNERS

# Now READY... A NEW CATALOG of Superior LP-GAS VALVES, FITTINGS and ACCESSORIES

This new catalog illustrates and describes SUPERIOR cylinder valves. Also globe, line and angle valves—diaphragm packless and wing cap—in flare or sweat sizes; sight glasses, suitable for any normal LP-Gas pressure; and a complete line of LP-Gas Fittings and Accessories.

Write for Your Copy of Catalog LP-9 Today

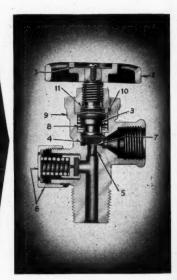
#### CHECK THESE SUPERIOR FEATURES

CATALOG LP

- 1. Etched name and handwheel retainer plate
- 2. Octogon grip handwheel-easy to operate
- 3. Husky one-piece lower stem
- 4. Improved construction for lacking seat securely
- 5. Generous opening permits rapid filling of cylinder
- 6. New, unique safety relief construction
- 7. Body seat design minimizes wear of vital parts
- 8. Strong spring assures positive valve opening
- 9. Sturdy forged brass body
- 10. Multiple metal diaphragm forms positive pressure sea
- 11. Metal-to-metal backseat when valve is fully opened

\*Customer may specify special printing, and own trade name (special to order).

Superior LP-Gas Cylinder Valves are listed as Standard and for Re-examination Service by Underwriters' Laboratories, Inc.



445

Superior Valve and Fittings Co.



DISOP WEST LIBERTY AVE., PITTSBURGH 26, PENNA.
OFFICES IN PRINCIPAL CITIES - STOCKS: CHICAGO (6) - LOS ANGELES (15) - JOBBERS EVERYWHERE

## WARREN ANNOUNCES ATLANTIC SEABOARD FACILITIES AT NEWARK

Warren's LP-Gas marine terminal at Newark, N. J., now under construction, will receive its first cargo of propane via SS "Natalie O. Warren" early in December, 1947.

This new tank ship and terminal brings to the Eastern Seaboard large additional supplies of LP-Gas, so badly needed for industrial, utility, and household uses.

Sales offices at 60 Park Place, Newark, N. J. Telephone Humbolt 5-1489.

"1922-Silver Anniversary Year-1947"

#### WARREN PETROLEUM CORPORATION

- TULSA, OKLAHOMA

Detroit

Mobile

Houston

#### October advertisement





Now you can offer the space heater your customers have been waiting for:

Economy. priced

... the new

When you sell the new In-land Comforteer, you offer the latest in space heaters. It is extra-efficient, extrasafe, good-looking - and economy-priced.

An unvented, direct-type circulator - AGA-approved the Comforteer is complete and self-contained . . . factory-adjusted for your local type of gas; you make a quick, clean sale with no installation or service followups. It draws cold air from the floor level, heats it, and circulates it to the farthest

corner. Easily moved. Interior baffle aids even distribution of heat, reduces fire hazard. Burner designed to operate without smoke or odor. Beautiful neutralbrown finish.

Order by model number directly from the factory: Model 125A for natural gas; Model 125B for manufactured gas; Model 125C for mixed gas; Model 125D for bottled gas. Write us today for free, detailed literature giving you prices and terms.

INLAND STEEL CONTAINER COMPANY Cortez and Bienville Streets New Orleans 19, Louisiana



Advertised in SUNSET HOLLAND'S MAGAZINE WOMAN'S DAY

(Southern Edition)

## LETTERS

#### Gentlemen:

We have had considerable discussion regarding the working pressure of our pipe as to whether it is to be standard or double strength. Could you advise us on this question?

H.C.V.

#### Washington

Pipe to be used on the high pressure side of the system, that is, the section that can receive full tank pressure, should be extra heavy. This is not because standard pipe will not stand the pressure involved, but due to the weakness of the pipe at the threaded joints. Steel pipe is satisfactory for house piping.—Ed.

#### Gentlemen:

I am in the equipment business handling butane and propane equipment in Alabama.

I would like to know just what butane or propane will do to leather. The leather we are using will turn hard and crack when it comes in contact with water. Will the above gases do the same as water to this leather?

#### Alabama

LP-Gas tends to dry out leather. Leather meter diaphragms must be treated with a special oil for service with liquefied petroleum gas.

Leather is seldom used in contact with LP-Gas, gaskets and diaphragms usually being made from synthetic rubber compounds. —Editor.

#### Gentlemen:

We are desperately in need of information telling us what size drill to use in drilling orifices for 20,- 000, 30,000, etc., Btu heaters. In changing natural gas burning stoves to butane we do not know what size orifice to use in order to give us the Btu rated capacity of the stove.

If you can get or have this information for us we would appreciate receiving it at the earliest possible time. If there are any charges please send us the bill and we will remit by return mail.

D.P.

#### Texas

If you will turn to page 198 of our Handbook Butane-Propane Gases you will find information which will be helpful to you in determining drill sizes of orifices for liquefied petroleum gas heaters.

Because of the urgency of your request I am sending you under separate cover air mail a copy of our Orifice Chart. The price of this chart is \$1.—Ed.

#### Gentlemen:

We are desirous of information concerning our bulk filling station operation to the end of increasing the efficiency thereof.

Equipment in use consists of a charging manifold with four 970 POL outlets, 50 ft. of 1" rubber, LPG pressure hose. With this equipment we are filling 100 lb. ICC cylinders for distribution. Tank storage is in form of twin tanks with a total capacity of 1210 water gallons or 1000 gallons net propane at 60° F.; dispensed to bottles through above mentioned hose and manifold by a pump.

Using this equipment with this set-

up we find that time consumed in charging 100 lb. ICC containers is

entirely too long.

We are most desirous of having your opinion and recommendations as to how we can accomplish loading in a minimum amount of time. If it is your opinion that efficiency could be increased by use of other type of equipment, i.e., vapor compressor, electrically driven pump, etc., we would be appreciative of knowing it.

W.B.T.

#### Pennsylvania

The filling time for 100 pound cylinders should not be over  $1\frac{1}{2}$  to 2 minutes on the average with a well designed unit.

Either the vapor compressor method or a motor driven pump with a bypass line running back to the tank will do your job satisfactorily and safely.—Ed.

#### Gentlemen:

We are unable to find a chart or a formula to solve the following problem:

We ship in 100% commercial propane in 10,000 gallon railway tank cars, and we unload this with a transfer pump. When we have all of the liquid transferred, we lose the remaining gas, that is left in the car, in vapor form.

Can you furnish us with a chart, or explain how to calculate the gallonage left in the tank car at the various temperatures and pressures?

V.F

#### South Dakota

In the April, 1945, issue of BUTANE-PROPANE News are graphs and tables designed especially for your problem.—Ed.

#### Gentlemen:

Several months ago when I first became interested in LP-Gas, I went to our public library (Carnegie) to get some information. After several clerks searched for an hour or so, they finally found a short article on bottled gas. It was in a Readers Digest of several years ago. That was the only information they had on the subject.

I have bought from you the "Handbook Butane-Propane Gases" and "The Bottled Gas Manual." Also a three-year subscription to BUTANE-PROPANE News. I am leaving the LP-Gas industry but not petroleum. Am the local distributor for Kidder Oil Co.—Koatsal, a graphite-valve oil. I am presenting to Carnegie Library, of Atlanta, all the literature I have, also my subscription to BUTANE-PROPANE News. Please send the News to Carnegie Library of Atlanta for the remainder of my subscription.

Thank you for your many courtesies. I am still a butane-propane

booster.

Herbert Winter

#### Atlanta, Georgia

That was a thoughtful and generous act.

It would be a good idea if all dealers furnished their local libraries with some accurate information upon our industry. If not books and subscriptions, at least our "ABC of LP-Gas." It's free.—Ed.

#### Gentlemen:

We hope you will find it practical to interest some of your readers in a discussion about service as related to butane gas business. We would like to see some articles in your magazine in regard to that phase of the business, because we believe it is vital.

We find mark-ups are lower than they formerly were, making profits lower, and we find that we have to render much service with new installations, many of which it is hardly fair to charge for. Many other service calls cost us just as much money but the customer is reluctant to pay.

We serve about 600 gas consumers in this county and add about 200 per

year. The service is devoted about 85% to these new customers. We have a good serviceman, pay him about \$220 per month; most times have a helper for him (pay the helper about \$160 per month), furnish him with a truck, etc. The outgo, therefore, is around \$480.00 per month.

It looks like this \$480 per month, or \$5760 per year is nothing else but a liability against each outfit of about \$38 per outfit. We have as yet devised no way to evade it, and no way to collect for it.

We are anxious, indeed, to learn if some one else has been able to come nearer to solving the problem than we have.

It looks like the \$64 question to us.

E.G.

E.J.S.

#### Alabama

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Every dealer has this problem and his success often depends upon a satisfactory solution. Dealers are invited to write in their opinions and offer suggestions.-Ed.

#### Gentlemen:

I am a plumbing contractor in New Mexico, where the fuels used are wood and coal and LP-Gas.

My problem is: I am often asked to connect appliances made for natural gas. I have connected kitchen ranges, the proper orifice being furnished by the manufacturer, but have refused to connect space heaters, unit heaters and water heaters.

This has caused ill feelings because the customers have purchased the appliances with the understanding that these appliances can be easily and quickly converted to use LP-Gas.

Do you have any suggestions to correct this misunderstanding?

I will appreciate any suggestion you mght offer.

#### New Mexico

The liquefied petroleum gas industry recognizes that it is always better to sell appli-

ances specifically made for use with LP-Gases. However, conversions are frequently made and if they are made correctly, good results obtain.

This applies to water heaters and space heaters as well as ranges. But in the cases of space heaters and water heaters, it must be remembered that it is against the NBFU code to use anything but a fully automatic shutoff for both the pilot burner and the main burner. For natural gas it is all right to use only a main burner shutoff.

After any conversion is made the AGA seal of approval is voided.

We think it would be good practice for you to always avoid conversions when you can, but if this is building ill will among your customers it might be well for you to study the best methods for converting water heaters and space heaters and perform that service.

Recommendations and precautions covering such operations are covered in our "Handbook Butane-Propane Gases" and our companion book, "The Bottled Gas Manual." Very possibly, you could also get valuable information by writing to the American Gas Association Testing Laboratories at 1032 East 62nd St., Cleveland, Ohio.

Conversion equipment can be purchased. It might also be wise to write to the manufacturers of the particular water heater and space heater which you may wish to convert and ask them for their recommendations.

#### Gentlemen:

We have been advised by another firm that they are using a mixture of common putty and linseed oil for a pipe thread lubricant.

Would the same mixture be as serviceable when used on propane gas?

P.D.

#### Colorado

While such a lubricant would not be soluble in liquefied petroleum gas, we would not advise its use without specific experimentation.

Putty hardens and cracks under bending and vibration, which would possibly result in the seepage of gas. Also, it is hard to break joints of long standing when they have been puttied .- Ed.

 BUTANE-PROPANE News welcomes letters from our readers, but it must be understood that this magazine does not necessarily concur in opinions expressed .- Editor.

## NeW THERMOPILOT

## MR-2 SAFETY

HIS new electro magnetic thermopilot assures unfailing safety in gas control applications. Used on space and unit heaters, central and floor furnaces, water and range heaters, hot water and steam boilers. Handles manufactured, natural or LP-Gases.

On the installation diagram, the new MR-2 valve and the new 26-R Pilot Burner are used for out-pilot safety control. No outside current is required. Valve holds open until released by pilot-flame failure. 100% gas shut-off will be maintained until pilot light is reignited and valve manually reset by push button.

For further information, contact your nearest factory branch or distributor, or write for Catalog 52-B and Manual F1-101.

#### Check these outstanding features:

- Streamlined design.
- High-flow capacities.
- Visual valve position indicator.
- Design simplicity.
- Sealed electro magnetic assembly.
- Heavy duty 5/16 round thermocouple,
- Flexible armored cable leads.

#### MR-2 INSTALLATION

VALVE INDICATOR WINDOW

WAR-2

THERMOPILOT

PILOT BURNER

VARIOUS STANDARD

MOUNTING BRACKETS.

MAY BE ATTACHED HERE

GAS CONNECTION

VALVE INDICATOR WINDOW

RESET

BUTTON

PILOT BURNER

CONNECTIONS

GENERAL 801 ALLEN AVENUE



CONTROLS
GLENDALE 1, CALIF. 4-1

PACTORY BRANCHES: Philadelphia, Atlanta, Boston, Chicago, Dallas, Kansas City, New York, Denver,
Detroit, Cleveland, Pittsburgh, Houston, Seattle, San Francisco, Distributors in Principal Cities.

## COMMENT

THE August issue of BUTANE-PRO-PANE News carried a story which recommended the utilization of tanks in a dealer's stock for storage of fuel. It was shown how this would enable many distributors to temporarily store larger quantities of gas for winter demand in addition to their regular bulk plants.

But it has been pointed out that when dealers resort to this method, they must be careful to never load onto their trucks and transport such a filled consumer tank. It is definitely against all codes and is hazardous.

Production of LP-Gases is on the increase and facilities for transporting the fuel are improving. Even ocean-going tankers carrying huge quantities of LP-Gas are now at sea. Supply is looking up.

The Liquefied Petroleum Gas Association is making an interesting experiment. Quarterly board of director meetings are being held in various districts, either following or preceding district membership meetings.

This enables the directors to have first hand contact with problems and developments in the various districts, as well as to show district members how the board operates, and it is all leading to a better understanding of industry problems and a closer union between the association itself and its members.

After Nov. 1, Treasury Department

restrictions on installment credit buying expire. The information is in Regulation W.

This is the end of another wartime restrictive measure which affected LP-Gas dealers. Whether or not the lifting of this regulation will be beneficial to the country as a whole remains to be seen.

States are almost clamoring to establish dealer groups.

Pennsylvania and Kentucky have organized associations recently, and Tennessee is writing by-laws and preparing to elect officers. Utah's new group is but three months old.

There is a real need for dealers within state lines, or geographical areas, to associate themselves for industry betterment, and the many existing state associations attest to evidence of this.

Don't kick (to us) if there is a meeting of dealers or an association in your locality and it is not listed in our Calendar of Coming Events or reported in our news columns.

We are anxious to have information on all LP-Gas meetings, but someone concerned must send in the facts.

Dealer meetings are important to the whole industry.

Now that Fire Prevention Week is over, some will say they can forget SAFETY till next October.

By Ed.



J. E. PRICE
Guest Editor for November

## Cooperation Pays Dividends

By J. E. PRICE

President, Florida Liquefied Petroleum Gas Association, and President, Southeastern Natural Gas Corp., Miami, Fla.

OWN in Miami, Fla., where we have 10 LP-Gas operators, experience has taught us that "cooperation pays dividends." Long before we had a State association, we had our local dealers association and our own "code of ethics." No operator will solicit another's consumer; and even if the consumer requests service when he is being served by a competitor, the company serving him is first contacted and told that his consumer is dissatisfied, and given an opportunity to contact and try to satisfy his consumer's complaint. If this is impossible, the original operator, naturally not wishing to have customers who are disgruntled, is always willing to have a competitor furnish the service desired; but only after the consumer has paid all indebtedness to the operator and has paid an installation charge to the company who is going to serve him. It is very surprising how few consumers change when this procedure is followed. It forestalls consumers jumping from one operator to another without any cost to himself, and at the same time works for the harmony of the industry.

Several years ago, one of our local operator's plant was completely destroyed by fire, originating in a reclaiming oil plant adjacent to his plant. The following morning all local operators met and offered any of their facilities necessary to carry on his business and to serve his consumers. This might be interpreted as a "magnanimous gesture," but realistically it was a selfish one made in the interest of the industry to see that his consumers did not go without service and in turn reflect upon the industry.

I have been associated for the past 17 years with a company which was a "pioneer" in the industry, this year being its twentieth anniversary. Over this period we have always worked with the city gas operator who, in my opinion, is our ally rather than our competitor. Our business should be and, I believe, was designed to serve the areas beginning at the end of the gas mains, and the rural areas where they had no available service.

Cooperation can usually bring a friendly solution to arguments; but fighting with your LP-Gas competitor or your city gas competitor usually is expensive in time and money.

### **Butane-Propane Tanks**

## Built by National



1. Three tank sizes being made—the 300-gallon sphere, and the 500-gallon and 1000-gallon cylindrical tanks with hemispherical heads. All three tanks are uniform in height, being 51 inches inside diameter.

2. Lightweight—a spherical design or a cylinder with hemispherical ends produces a tank of minimum weight for any given capacity.

3. Only the finest steel used—the U·S·S trade-mark, your guide to quality steel, appears on all NATIONAL LP Gas Tanks. This steel can be depended upon because it meets all the requirements as specified by the American Society for Testing Materials A-70-44 flange quality specifications.

4. Completely equipped—and ready to install. All fittings, including the regulator, are attached. Tanks are air tested at the proper pressure after fittings are attached to assure their tightness.

5. Good looks—NATIONAL LP Gas Tanks look good on the home lot. Their good looks are readily maintained by a protective primer coat which each tank is given before it is shipped.

6. Designed and built by experienced men—The many years of experience gained by NATIONAL Tube Company, the world's largest manufacturer of tubular products, have been invaluable in the design and construction of better tanks for the LP gas industry.





National 1000-gallon tank

SPECIFICATIONS — All National LP Tanks are made for 200-pound working pressure — the highest required for any LP gases. They meet the requirements of the A.S.M.E. code for unified pressure vessels for 200 pounds pressure. In addition, they meet all the requirements of the Mational Board of Fire Underwriters and bear the Underwriters and bear the Underwriters' Laboratories, inc. label.



#### NATIONAL TUBE COMPANY

PITTSBURGH, PA.

Columbia Steel Company, San Francisco,
Pacific Coast Distributors
United States Steel Export Company, New York

UNITED STATES STEEL



Illinois White Hall Marshall Flora Centralia Nashville Mt. Vernon Fairfield Mt. Carmel Sesser McLeansboro Carmi Benton Freeman Spur Carbondale Cairo Metropolis Indiana Boonville Newburgh Kentucky Clinton Paducah Marion Henderson

Hopkinsville

## Tri-State Distributors Make Flying Their Business

THREE airplanes have played a large part in the growth of Tri-State Gas Corp. from one bulk plant in June, 1946, to 26 dealer and central organization bulk plants in five states today.

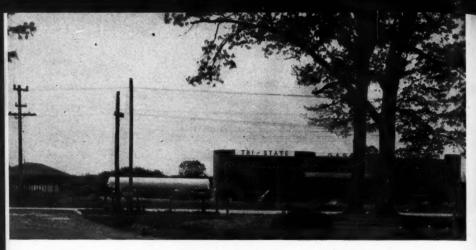
But when you ask Paul Miller, president, or Ernest Murphy, general manager and one of the pilots, if the airplanes have been the main factor, both of them say, "No, the cooperation of our friends, suppliers and employes—that's the principal factor."

By ED TITUS

Eastern Editor, BUTANE-PROPANE News

With the airplanes, nevertheless, they get around more and see their business friends oftener over most of the country, from Dallas to Baltimore, from Kalamazoo to Paducah, and to Daytona Beach, Fla.

Tri-State is completely sold on airplanes as a great asset in their business, and for almost anyone else in the LP-Gas distribution field. They use them for service



Tri-State Gas Corp. main office and bulk plant, Mt. Vernon, Ill.

calls, for calls on manufacturers to speed deliveries, and for a few score of varied purposes, including selection of sites for bulk plants. Surprisingly, they find travel in their own small and medium sized planes not only faster, but more economical in their business, than ground travel.

We've surveyed Tri-State's operation with a trip there. In a series of articles, of which this is the first, we'll tell some of the progressive ideas used by these fast-travel-

ing people to speed the building of business. They are spreading out in every direction from Mt. Vernon, Ill., and Paducah, Ky., as hubs. They point out they are completely independent of the big companies—just a group of local community people who got together and started a business. They get their supply of propane from a jobber.

To begin with, just how do they use their three airplanes, and what does it cost them? Cost figures will come later, but here are a few instances of uses:

One day when Mr. Murphy ("Murph") was in the Mt. Vernon head office he received a call from a dealer in Sesser, Ill., about a customer's difficulty with a floor furnace during some very cold weather. In a few minutes Murph was at the nearby airport, and flew to DuQuoin, Ill., where he was met by the dealer, who drove him to the customer's home. The floor furnace was beyond repair.

So Murph phoned the Empire

This is the first of three stories about the extensive operations of the Tri-State Gas Corp. The operations represent the modern trend toward unified management, speed in covering territory and the adoption of recognized safe practices for the entire personnel.

Dealers will be interested in reading about the company's safety schools, personnel problems, dealer outlets, truck operations, service methods, appliance selling, methods of pricing, commercial installations, etc.

Every dealer can pick up some important information from these articles that he can apply to his own business.—Editor. Stove Co. at Belleville, Ill., requesting a complete burner assembly be sent to the airport at Belleville for immediate pickup. Murph took off, reaching Belleville in 35 minutes. Meanwhile Ade Bowers, plant manager of Empire, elected personally to drive with the burner assembly to the airport, and arrived at about the same time as the airplane. Murph flew the new equipment back to Du Quoin and installed it in the furnace. The whole operation took two hours and the happy customer had heat again. This was in February.

#### **Emergency Service**

The Tri-State central organization will make a similar flying service call any time in the winter to get a customer heat. Sometimes they land in a pasture beside the customer's house.

Murph has traveled over a large part of the United States, flying one or another of the company planes. Often the purpose is to contact manufacturers to help speed deliveries, and to maintain cordial relations. He has found these rapidfire trips, making a lot of personal calls on key people, to be very effective. He guesses he spends about half his time that way, and has flown in a company plane as far southwest as Dallas, to contact Southland Steel, and as far east as Baltimore, to see Standard Gas Equipment.

States in which Tri-State operates are Illinois, Kentucky, Indiana, Missouri and Florida. The central operation is in the first three, and the most distant points in this principal territory can be reached

in an hour each way by plane. With the aid of aircraft it makes a compact, closely knit setup.

As Murph puts it, "The airplane, like the horse, is here to stay." He thinks he averages 2000 miles travel a week, the great majority by plane. As a pilot he counts 3000 hours flying time. The two other pilots with the central organization are Pearl Spence and V. J. McNett, both gas men, too. In addition to the three planes and three pilots of the central organization, two of the dealers, the Hilliard Brothers of Marion, Ky., and Jim Story in Daytona Beach, Fla., use planes in their LP-Gas business. making a total of five in the Tri-State system.

The Henderson, Ky., bulk plant site is an example of one selected from the air. Tri-State people believe that in this way they can get a better view of the surroundings,



Paul W. Miller

including the town and traffic, having in mind partly future possibilities of installing dispensing units for internal combustion engines.

The planes serve to take the Tri-State people back and forth to their Florida operation. Labor day weekend, when Jack Helmert of Kalamazoo Stove and others expressed an interest in the Florida setup, Murph piloted him and three others to Florida and back with a number of stops in their twin-engined plane, leaving Mt. Vernon at 9 a.m. Friday and getting back to Kalamazoo at 10 p.m. Sunday. Murph certainly slept well Sunday night.

But some of the toughest flying is when they descend on a cus-

tomer's pasture.

"I've been into some awful fields," said Murph. "Boy, there have been a few times when I didn't know whether I'd get out over the wires or not."

#### **Economical Travel**

Tri-State figures that with the small planes, cost of travel is only three cents a mile, including storage of the plane and everything. Murph says it is cheaper for them to travel in their planes, even before they figure how much their own time is worth and how much time they save. On a recent trip from St. Louis to Mt. Vernon to Paducah, slightly over 200 miles, with Murph and one passenger, 12 gals. of gasoline was the total consumption. They use 80 octane gasoline, costing 23 to 35 cents per gal.

Murph asserts it's cheaper to fly even when all their planes are tied up and they rent a fly-yourself plane at Mt. Vernon, for \$6 an hour. The charge only applies while the plane is in the air, and not for ground time while they're calling on a dealer or servicing a customer. Since the planes cruise at above 100 miles per hour, it makes the cost six cents a mile, this being cheaper than car hire, and possibly cheaper than driving your own car if you figure in your depreciation, garaging and other fixed costs. The \$6 an hour plane hire includes gasoline and all other costs.

#### Tri-State Personalities

The company's airport bill in Mt. Vernon runs over \$1000 a month and is well worth it, they believe.

Servicing of the company's planes is under the personal direction of Earl Outland, who captained a C-54 on a world flight during the war and is now in charge of the Mt. Vernon airport.

What kind of people are back of this Tri-State organization?

Paul Miller, president of Tri-State Gas Corp., started his business career at the age of six, helping to deliver milk from the farm near Metropolis, Ill., operated by his widowed mother. From the dairy farm, Mr. Miller got into the milk distribution business on a much larger scale, and operates the Miller Dairy Products Co. He also operates the Miller Auto and Home Supply Co., of Metropolis, which has handled bottled gas for a number of years. Recently made president of Tri-State Gas Corp., he brings to this LP-Gas business considerable experience in dealing with the public.

R. E. Thorpe, now of Daytona Beach, Fla., originated the idea of Tri-State Gas. He had been a coal and wood range salesman all his life from the age of 11. He got into LP-Gas business in 1940 when he ran into bottled gas competition in his efforts to sell the old type ranges. He organized the present company in 1944, started operations June 15, 1946.

Mr. Thorpe got his backing for Tri-State by hitch-hiking to Mt. Vernon to seek a backer, and getting introduced in a restaurant to Dr. A. W. Modert, a widely known surgeon. Dr. Modert became the

original investor.

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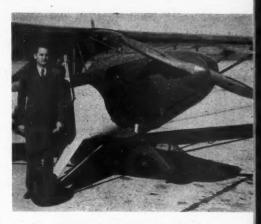
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Ernest Murphy, general manager, has been in the LP-Gas business since the age of 16. He is now 32.

Tri-State's construction operations began when they bought a mud-hole beside a highway in Mt. Vernon in 1945. They filled in and then at a cost of \$100,000 erected the building where their modernistically finished principal offices are now located. Outside is a 30,000-gal. tank, on which is painted "It's fun to heat with 'Gas'," the slogan used on all their bulk plants.

In Paducah the company has acquired for future expansion all but a couple of corners of a city block, now partly vacant. It is proposed to make Paducah the central storage point. The newly erected building there also cost \$100,000, and there is one 30,000-gal, tank.

Tri-State Gas handles propane entirely. The contract with the supplier is based on a Group Three freight rate, and permits the supplier to make shipment on the con-



Ernest Murphy beside his plane

tract from any point in the United States, the freight bill always reading as if it had been shipped from Oklahoma City.

The expansion from one bulk plant in June, 1946, to 26 at present has been accomplished by installing 30,000-gal. plants of the central organization, and selling 7000-gal. bulk plants to persons selected as dealers, usually on conditional sales contracts under arrangements with large finance companies. The dealer operations are under the name Tri-State Gas Co.

#### **Tri-State Locations**

Location of bulk plants of Tri-State and its dealers are as follows:

Illinois: White Hall, Marshall, Flora, Centralia, Nashville, Mt. Vernon, Fairfield, Mt. Carmel, Sesser, McLeansboro, Carmi, Benton, Freeman Spur, Carbondale, Metropolis, Cario. Total 16.

Kentucky: Clinton, Paducah,

Marion Henderson, Hopkinsville. Total, 5.

Indiana: Newburgh, Boonville. Total, 2.

Missouri: Near Columbia. Total

Florida: Daytona Beach, New Smyrna. Total 2. (Operation in Florida is by Seaboard Gas and Appliance, connected with Tri-State).

Grand total, 26.

Tri-State has a retail operation from each of its own bulk plants. Many of the dealers, in addition to doing their own retailing, have sub-dealers who draw their fuel from the dealers' bottling plants.

It is Tri-State's policy to seek house heating installations first of all. They believe there is plenty of business of this sort to be had in their territory, and that once a customer is sold on house heating, he'll go along quite easily on a range, water heater, and so forth.

A notable point about the success of Tri-State in this field is that they operate in the midst of a big coal-mining area. (They also compete with TVA electricity in much of Kentucky without much trouble in their sales of appliances and LP-Gas).

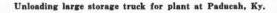
Murph estimates the cost of heating with propane averages about 20% higher than cost of coal, in their territory.

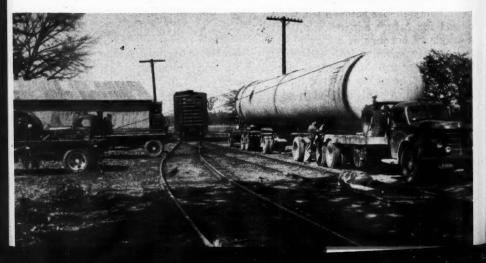
Here it is:

In their part of the country, the heat season comprises about 30 weeks. They break down the added cost of propane heating on a weekly basis, and often find it's about \$1 a week more.

"We tell them," said Murph, "that it's worth \$1 not to have to build a fire, carry out the ashes, and get the coal fire to the right temperature. We point out also the cleanliness of our fuel, and that it saves money on cleaning bills."

In some cases Tri-State finds that propane costs about the same as coal for heat. This is when a home customer has a stoker-fired





#### CONSUMER AGREEMENT AND CONDITIONAL SALES CONTRACT

Date		(Aux
TRI-STATE GAS	CORP., Mt. Vernon, Illinois, herein called	
'Company," and	and the second s	GAS CORP.
herein called "Consumer	," mutually agree as follows:	Z GAS COMIT
1. Subject to the hereinafter referred to	terms and conditions hereof, Consumer buys from the as equipment.	Company the following,
	Serial Number	
	Capacity	
	Hood Number	
to be installed and locat	ed at	•
Street or R. F. D.	Township ·	County
Town or City		State
2. Consumer agree	es to pay for said equipment \$ The sum o	f \$upon
2 The title to the	f every kind. Failure of Consumer to purchase liquefied pet Company shall render above balance immediately due and p	urmshage mules has been
3. The title to the paid. The Company m with or without notice ments theretofore made	i Company shall render above balance immediately due and peequipment shall remain in the Company until the full pays at any time before final payment, upon violation of a enter upon Consumer's premises and repossess said equippee as liquidated damages and/or as reasonable rental for tity upon the Company for trespass or damage occasioned the dof any other obligation or indebtedness to the Company.	ourchase price has been ny of the terms hereof, ment and retain all pay- ne use of said equipment.
3. The title to the paid. The Company must be used to the ments theretofore mad There shall be no liabilissumer be thereby relieved.  4. This instrumenthis agreement, contain additions not included ha waiver of any other d	e equipment shall remain in the Company until the full p ay at any time before final payment, upon violation of as enter upon Consumer's premises and repossess said equips e as liquidated damages and/or as reasonable rental for the ity upon the Company for trespass or damage occasioned the ed of any other obligation or indebtedness to the Company, it, including the additional provisions on the back hereof, we not the entire contract between the parties hereto and no verein shall be valid. The waiver of any default or violation I lefault or violation. This agreement shall not be binding on	purchase price has been ny of the terms hereof, ment and retain all pay- ne use of said equipment, hereby nor shall the Con- thich are made a part of
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The contract form of the Tri-State Gas Corp. for signing up customers.

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s e a d furnace and maintains an adequate

temperature.

Murph believes one point of caution for a new operator to bear in mind is that some of his first prospective heating customers may be the most difficult to serve. Those with the most heating problems and the most unsatisfactory methods of heating at present will flock in. In a conversion job, the gas burner does not always correct the deficiencies. It may leave unsolved conditions that are fundamentally wrong with the customer's setup. If a new dealer initially undertakes some of these more difficult jobs, he may build an unjustified reputation for not making satisfactory installations.

In some 30 communities within the territory served by Tri-State, gas from the mains is available. They estimate their propane heat installations operate at 20% below the cost of this gas on the average. Nearly all the piped gas systems are said to supplement with 20 to

50% propane.

Tri-State believes the cost of heating with their propane is about the same as the cost with fuel oil. In competition with fuel oil, Tri-State makes the point that their service is fully automatic, as against semi-automatic for oil. And Tri-State at present offers free service while fuel oil people in the area usually don't.

Percentagewise, Tri-State's business is divided about as follows:

House h										
house	heat	ir	19							.30%
Commer	cial									.25%
Industri	al									10%

Tri-State likes to serve the small consumer.

The central organization, rather than dealers, at present handles most of the delivery to customers in quantities larger than cylinders. This is done partly in Tri-State's own tank trucks, and partly by an outside tank trucking organization.

#### Training Program

Each bulk plant of the central organization and dealers has its own bottling plant, from which the product is sold direct to customers

and through sub-dealers.

The organization has been built around a nucleus of about a dozen experienced gas men. Through a system of semi-formal schooling, in which BUTANE-PROPANE News is a required textbook, the dealers and employes new to the gas business are being carefully trained. No one is permitted to be a menace to safety by embarking on projects that are beyond knowledge.

Tri-State adheres strictly to codes, and they are doing everything possible to maintain a good

safety record.

On matters of personnel, schooling in the LP-Gas business, sales, servicing, and others they are doing some independent thinking.

Their dealers have been recruited from a surprising variety of former professions. The contract with them has some progressive features. Tri-State has worked out ideas on cooperation with the community through gas utilities, schools, and various stores.

More about how Tri-State is doing it will be told next month.



Combine on the Foust-Barr rice farm.

E ACH year writes a new chapter in the American saga of agricultural progress in the South—an almost fantastic progress from the development of new industries that start new gold flowing into the bank accounts of the farmers. The magic propeller of these new developments is butane. Butane has brought about as great, if not greater. agricultural revolution than did Henry Ford by putting the farmer behind the steering wheel of family cars, trucks, and tractors. Without butane this constructive revolution in farming would have been impossible.

The Foust-Barr Rice Farm at White Hall, Poinsett county, Ark., is a prosperous example of butane evolution in areas far removed from natural gas mains. Here, acres that once grew only cotton, cultivated with mules and hand chopping, are now doubling and

#### By ZOE JOHNSON

thribbling the dollar yield by planting to rice, cultivated with tractors and harvested by combines.

The Foust-Barr Rice Farm has no officers. It is an equal-sharing, family - functioning partnership that, by pooling labor, capital and initiative, has built a modern rice drying plant by the side of the road and converted its 450 acres of land to the cultivation of rice. But they went over to rice farming gradually experimenting first with one well and 100 acres.

The members of the partnership are: J. I. Foust, retired, except in an advisory capacity; Austin F. Barr, Jr., son-in-law of J. I. Foust, is bookkeeper, farm manager and machinery mechanic. Mr. Barr loves and curries his tractors, combine, and other machines as the

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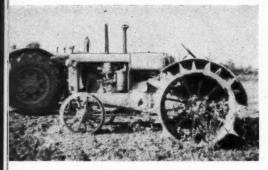
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Tractors used in rice fields.

old-time farmer did his prize mules and pedigreed draft horses. Ed. J. Foust, son of J. I. Foust, operates the drying plant and storage rooms. He also has the responsibility of keeping the building in order and superintending the construction of more storage capacity.

At present they have a storage capacity of only 40,000 bushels. Mr. Foust says it is lack of storage capacity that is cramping most drying plants in the rice country. The acreage planted to rice has leaped ahead of storage facilities so much faster than anticipated that the big drying plants are looking hopefully to other avenues, such as home storage houses on the farms to help relieve them of their storage problems. Another problem that is pinching storage bins is lack of freight cars to move the crop.

Mr. Foust says it takes about 8 months of hard work to plant, harvest, and dry a rice crop, but if it is the work you like to do, that makes the wheels go round.

And there are plenty of wheels going round on the Foust-Barr Farm that through the depression years made its owners almost land poor. There is one Massey-Harris combine and four tractors. And there are trucks and all other wheels to keep going for there is no farm stock on the plantation. And there are the four pumps to supply water for flooding the rice.

The loudest wheels of all are those of the big Berico dryer of H. M. Shanzer Co., bought through the Thorrel Supply Co., Stuttgart, Ark., and installed by Dee Baker, the Shanzer installation man. One motor drives the dryer and another runs conveyors. There are also six motors running conveyors and elevators.

The butane system was installed by Wixson Bros. Equipment Co., Fisher, Ark. The Wixson people also installed butane house systems for all the Foust-Barr residences.

The plant has not yet been able to obtain scales but will as soon as they are procurable.

The Foust-Barr dryer (capacity 500 bushels per hour) began operating in October, '46, and they expect to dry 200,000 bushels of rice this season. When the drying season is at its peak they will run 24 hours a day.

#### Rice Territory

As Poinsett county is the second largest rice producing county in the state, there is a wide area to be serviced by drying and there are only two rice mills in the county; the Moulton Rice Milling Co., at Harrisburg, and one at Weiner, both using butane.

Mr. Barr says there is need for more dryers in the county and a

desperate need for combines for harvesting, as combines are still practically unattainable. The Foust-Barr combine is also a money maker on the side, for when not harvesting their own rice they are busy every day harvesting for surrounding farms at 15c per bushel.

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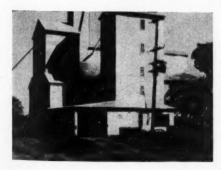
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Mr. Barr expects the combine to pay for itself in two years by harvesting for neighboring farms and in the quantity of grain saved by combine harvesting as compared to the old thresher method. Under the old method, when grain was shocked in the field there were staggering losses from the thousands of black birds that came to feed: migrating ducks did their damage; rats, possums, and many other small animals harbored under the shocks, destroying many bushels of grain. If a long wet season came after shocking, much of the rice rotted and had to be carried from the field and burned.

They count on a 35,000 bushel crop this year from the farm, and feel that if they dried only their own rice, the dryer in the long run would be a good investment.

Mr. Barr estimates that the cost



Arkansas rice dryer.

of electricity, labor and butane is 2c per bushel for drying, thus leaving a profit of 13c on every bushel dryed for customers. He is highly pleased with the low cost of butane and says there is still plenty of room for other dryers in the county. And lack of storage is still a greater handicap to the rice farmers than drying facilities.

#### Rice vs. Cotton

Across the road from the dryer is a cotton gin. Once the acres for miles around were white with cotton boles that were hauled to its bins but now it must divide prestige with its rival, the rice dryer. Hundreds of acres are now nodding in a sea of green and yellow rice, harvested by machinery, dried and ready for sale or storing in a much shorter time than the cotton crops can ever hope to achieve.

There is one faint shadow—a very small shadow far on the horizon—that gives pause to the visions of the rice farmer; the water level below the rice lands is lowering at an average one foot a year.

If seeding of rice is done by airplane the ground is flooded from 4 to 6 inches and the seed dropped on the still water where it sinks immediately and soon sprouts.

Thus, each year, despite winds and rain storms that sometimes reduce the yield new acreage in Arkansas is planted to rice, new dryers are built, new combines and tractors are bought, hundreds of butane installations are made, all writing a new chapter of agricultural progress in the South.



LP-Gas Takes to the Air

By O. D. HALL

over the smooth performance of the plane as it circled over the airport for a total distance of 71 miles. The 85 hp Continental engine operated on 70% propane—30% butane mixture, but the special LP-Gas equipment was designed for equally as efficient operation on a 60-40 percent mixture, Mr. Hughes said. The fuel was mixed by M. C. Clanton, of Oklahoma City, who, before entering the LP-Gas business for himself, had 15 years' experience in mixing fuels with the Phillips Petroleum Co.

Several firms cooperated with Mr. Hughes in manufacturing and supplying the special LP-Gas equipment which was installed on his airplane. These, and the equipment they supplied, include: The Bastian-Blessing Co., Chicago, "Rego" valves and fittings; J. & S. Manufacturing Co., Dallas, Texas, mixer and carburetion equipment; Acme Equipment Corp., Dallas, regulator and heat exchanger installations, and Dallas Tank Co., Dallas, LP-Gas fuel tank.

Can Also Use Gasoline

The 5-gallon (water capacity), 200 lb. working pressure fuel tank is installed directly behind the pilot's seat. It is equipped with an LP-Gas "Rego" relief valve and hose connection which vents through a window to the outside of the cabin. Mr. Hughes explained that a larger fuel tank was not needed on the plane which is dually equipped to fly on both butane-propane mixtures and aviation gasoline. He stated, however, that engineers are developing lighter materials than steel for tanks with equal pressure resistance.

Oil instead of water is the cooling

A BRIGHT future for LP-Gas in aviation was indicated when a light airplane was flown successfully over Will Rogers Field, Oklahoma City, Okla., on Sept. 17, using this gas alternately with aviation gasoline in a 38 minute test flight.

The plane used in the test was a Cessna-140, owned by L. L. Hughes, of Oklahoma City, and flown by Fred Reese, Shawnee, Okla., test pilot and an airport manager. The special LP-Gas equipment installed on the plane was designed and adapted by Mr. Hughes. He had previously spent several minutes explaining to CAA authorities at the field the functions and operation of the LP-Gas equipment. At the conclusion of the inspection CAA authorities gave him an experimental license good for one year to operate his plane on LP-Gas.

Mr. Hughes holds a private flyer's license and has a sales agency for the Cessna airplane.

The pilot and those who watched from the ground were enthusiastic



L. L. Hughes (at left) and Alfred K. Young, CAA inspector, both of Oklahoma City, inspecting the regulator and heat exchanger equipment on the airplane. The inspector asked Mr. Hughes scores of questions and examined the power plant additions minutely before giving permission for the flight.

This 5-gal., 200 lb., working pressure, LP-Gas tank is installed directly behind the pilot's seat. The hose at the right is part of the relief valve equipment and vents through a side window to the outside of the airplane cabin. The gasoline tanks are installed in the wings.

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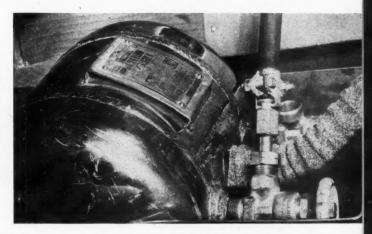
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agent in the system. The oil circulates from the pump through the heat exchanger and back to the moving parts. In the process it is cooled 20%, an essential process in operating an airplane power plant on LP-Gas and helpful in operating on gasoline. A 12-volt electrical coil system insures the right degree of heat for the fuel at higher altitudes or in varying weather conditions.

The LP-Gas equipment installed for the test flight added 21 lbs. to the engine and a total of 92 lbs. to the overall weight of the airplane.

Among advantages claimed for the use of LP-Gas in flying airplanes, some of which were proven in the experimental flight from Will Rogers Field, are: Lower fuel costs—the plane flew at an average of 110 miles per hour on 9 cents per gallon liquefied petroleum gas fuel mixture at a total cost of 36 cents and alternated with the use of 28 cents per gallon aviation gasoline at a total cost of \$1.12 for that fuel. As the pilot flew the plane he switched fuels easily and

smoothly by merely turning a dial. The change-over from gasoline to LP-Gas was accomplished in one-half the time required for the switch from LP-Gas back to gasoline, Mr. Hughes stated.

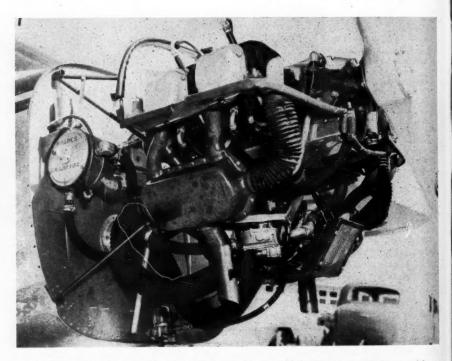
While the flight was not long enough to prove the comparative maintenance cost between LP-Gas and gasoline, there was every reason to believe that similar advantages for use of butane-propane in flying air-

\*Airplanes have been flown on LP-Gas many times before this, but possibly not under such auspicious circumstances.— Editor. planes, as already have been proven in operation of trucks and other motor equipment, can be demonstrated by a series of longer flights.\*

#### Car Butane-Equipped, Too

Mr. Hughes transported a number of observers of the test flight to the airport in his passenger car which he says has been driven over 200,000 miles on LP-Gas. Little or no carbon has formed in this engine, which has never required an overhaul.

Mr. Hughes and the test pilot expressed entire satisfaction with the results of the test airplane flight but



Close-up of the 85 hp. engine with LP-Gas equipment added. The heat exchanger, with oil line hose connections, is shown at the extreme left. Near the bottom and front of the power plant are the mixer and carburetor installations, which make it possible for the pilot to fly the plane alternately on LP-Gas and aviation gasoline during flight by merely turning a dial.

admitted that a long road still lies ahead before LP-Gas fuel is generally accepted as a fuel for private and commercial operation of airplanes. They believe, however, that this successful test will pioneer the way for further development which will hasten the day when this goal is accomplished. They also believe that this flight has opened the way for important expansions of the business of LP-Gas manufacturers, dealers and equipment manufacturers and distributors in the industry.

Mr. Hughes has had long experience in Oklahoma as an LP-Gas dealer and distributor at Erick, Shawnee and Oklahoma City, and owns and operates the Hughes Distributing Co., which handles many types of LP-Gas appliances and equipment; also trucks and Cessna airplanes.

#### LP-Gas Dealer Cashes In On Kentucky County Fair

Annually Gallatin county, Ky., puts on a fair that offers manufacturers and distributors opportunities to display their wares to excellent advantage.

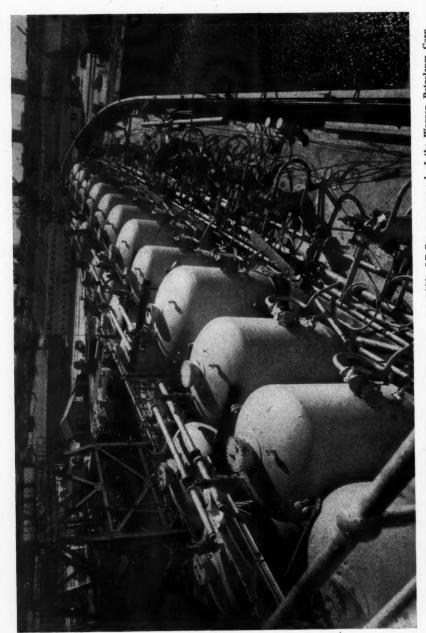
This year the Webb Philgas Co., Warsaw, Ky., engaged a booth 9 ft. by 44 ft., which brought such excellent returns that the firm will undoubtedly display at all future fairs.

According to Melvin E. Gayer, of the Webb Philgas Co., 2132 individuals registered at their booth during the fair. The estimated number who saw the display, but without registering, was 5000.

There were nine stoves on display, shown in the accompanying photograph. The actual sales returns from this display totaled \$1958.70.



This display of the Webb Philgas Co., Warsaw, Ky., at the Gallatin county fair told 5000 visitors that "Gas Has Got It."



Looking forward on upper deck of the "Natalie O. Warren," a 33,000-bbl., LP-Gas cargo vessel of the Warren Petroleum Corp. and Warren Maritime Corp., christened at Beaumont, Texas, Oct. 11, for twice-monthly service—Texas to Northeast and Middle Atlantic Seaboard.

## Coastwise Tanker Will Haul Propane to East Coast

C HRISTENING of the SS "Natalie O. Warren," first ocean-going LP-Gas tank ship ever constructed, took place at Beaumont, Texas, at 4

p.m., Oct. 11.

This ship will operate between the Warren Gulf Coast terminal at Houston (Norsworthy) and Newark, New Jersey, and other Eastern seaboard ports. It will make two round trips monthly, and will be able to deliver 66,000 barrels, or 2,772,000 gallons, of liquefied gas per month into the heavy consuming areas along and adjacent to the upper Eastern seaboard.

The ship was christened by Mrs. W. K. Warren, Tulsa, Okla., for whom it is named. She is the wife of Wm. K. Warren, president of Warren Petroleum Corp. and Warren Maritime Corp. Her matrons of honor were Mrs. J. A. LaFortune, wife of the executive vice president, and Mrs. Howard E. Felt, wife of the corporation's vice president in charge of the liquefied petroleum gas division.

The christening ceremonies were preceded on the evening of Oct. 10 by

an inspection of the vessel by executives and key personnel of the two Warren corporations and Pennsylvania Shipyards, Inc., which handled the construction.

The SS "Natalie O. Warren" was converted from a C1A dry cargo vessel by the installation, in its five holds, of 68 large tanks (stood on end), each capable of withstanding 250 pounds pressure per square inch. The tanks were set in vertical position, in four rows, the length of the ship, and were so fabricated that all connections are above the ship's top deck.

Warren Petroleum Corp. is now constructing a 50,000 bbl. LP-Gas terminal at Newark, N.J., and recently enlarged its Norsworthy (Houston)





Above: Mrs. Natalie O. (Wm. K.) Warren, sponsor. At left: Mrs. J. A. LaFortune and Mrs. Howard E. Felt, matrons of honor.

terminal to 60,000 bbl. (LP-Gas) ca-

pacity.

The two inboard rows of tanks extend above the deck from 5 to 14 feet. Some of the tanks are 8 feet in diameter while others are approximately 13 feet in diameter. Some of them are 17 feet in length while a majority of the inboard tanks are almost 50 feet in length.

By keeping all connections above deck and equipping each tank with a water and gas tight sealing ring there is no possibility of water or liquefied petroleum gas, either in liquid or vapor form, getting into the ship's holds. All of the tank's relief valves are piped into a large header which, in turn, is tied into a specially constructed, hollow mast, which would vent the vapors 60 feet above the deck.

The holds have been equipped with combustible gas detecting equipment which would sound an alarm if a mixture of only 40% of the lower explosive limits should appear. The ship's smoke detecting equipment also has been re-installed in the holds and machinery spaces. A still further safety precaution has been the installation of ventilating ducts which reach to the very bottom of the ship and which completely change the air in the ship every 30 minutes.

The entire operation of taking on or discharging cargo is handled in a completely closed system with both manual and automatic controls. One man, for example, can instantaneously shut all valves and stop all operations by touching any one of several switches located at strategic points on the ship. Several naval architects have called the ship "the safest tanker afloat."

The vessel will carry approximately 33,000 barrels of propane at a speed of 14 knots.

### Kansans Sold on Large Consumer Systems

THE rapidly increasing popularity of 1000-gallon LP-Gas systems is reflected in figures recently released by

Sam Boothe, vice president of Homegas, Inc., Wichita, Kan.

In the period from V-J Day through October, 1947, Homegas, Inc., through its Homegas dealers installed 6,288 LP-Gas systems in the 97,298 farm homes of the Western two-thirds of Kansas.



SAM BOOTHE

During 1946, nearly 86% of the installations were 500 gallon systems and another 12% were 300 gallon systems: only 2% were 1000 gallon.

As a result of intensive dealer education, coupled with a consumer merchandising campaign begun in January, 1947, installations in 1947 were:

One-thousand gallon systems, 58%; 500 gallon systems, 37%; and 5% were light-duty systems installed where only cooking and refrigeration were desired.

"We are proud of the fact that the consumer campaign developed by Homegas, Inc., was adopted by our Kansas association and has been so widely quoted by other state associations," Mr. Boothe stated. "When people have the facts, they are perfectly willing to invest in a system capable of storing at least half of their full year's fuel requirements."

## It's Chicago in '48 Says the NBPA

THE 1948 convention of the National Butane-Propane Association will be held at the Congress hotel next Sept 20-22. And the 1949 meeting goes back to St. Louis.

The selection of places and dates was made by the association's newly elected board of directors following the conclusion of the 1947 convention in St. Louis, Sept. 15-17.

John M. Robinson, Butane Gas Co., Woodward, La., was elected president of the organization for a second term. (See October issue, BUTANE-PROPANE News, Page 65.)

Vice presidents to serve are John L. Locke, Northwestern Blaugas Co., St. Paul; R. N. Short, Red Devil Butane Gas Co., Franklin, Ky.; H. G. Baur, Butane Gas and Appliance Co., Webster Groves, Mo.; Joseph Herrmann, Joe Herrmann's, Inc., San Antonio, Fla; Harry H. Torbit, Union Gas & Equipment Co., Pueblo, Colo; and





J. M. Robinson re-elected president National Butane-Propane Association, opening St. Louis convention, Sept. 15.

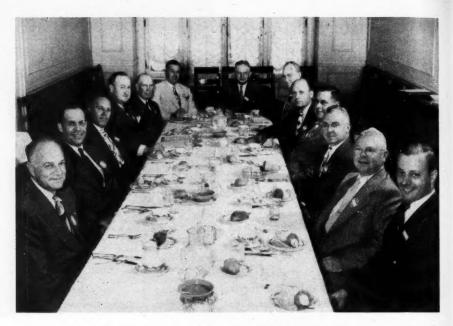
Earl C. St. Cyr, Cyr Bottled Gas Co., Marquette, Mich.

Harry H. Torbit will again act as treasurer and Willard A. Moey, manager of the conventions last year in Chicago and this year in St. Louis, was named secretary.

Elwin E. Hadlick, who has directed the operations of the association since its inception, was again named executive vice president.

The members of the board of directors will be found elsewhere in this report.

More than 400 members and industrymen attended the second annual convention this year. Manufacturers' exhibits, totaling 38 and



The 1947 board of directors of the NBPA, meeting in St. Louis prior to national convention. At far end of table are President Robinson (left) and E. E. Hadlick, executive vice president,

overflowing the allotted space, showed many new products and elicited wide-spread interest among dealers.

The convention program was spaced out over three days to permit attendants to have ample time to visit the display boothes, attend ball games and other social functions and establish acquaintance-ship among fellow dealers from all over the country.

Among papers and talks directly concerning the industry was one made by Lee A. Brand, vice president, Empire Stove Co., entitled "The Partnership of the Appliance Manufacturers and the Liquefied

Petroleum Gas Dealers." This is printed in full on page 115 of this issue.

Kenneth R. D. Wolfe, Fisher Governor Co., gave a paper, entitled "Maintenance of Regulators and Utilization Equipment," of unusual importance to the industry. It was published in substance in an earlier issue of BUTANE-PROPANE News.

Because of the illness of G. M. Kintz, U. S. Bureau of Mines, Dallas, H. F. Browne, his associate, delivered a talk upon the subject of "Developing Personnel Consciousness." At the conclusion of the meeting, the board of directors passed a resolution extending to

the U. S. Bureau of Mines and to Mr. Kintz and Mr. Browne sincere appreciation for the work done in the field of butane and propane gas operations and for the outstanding contribution which they have thereby made for the promotion of public welfare through their series of 11 fire demonstrations which were given in various cities during the past year.

"Modern Forms for a Fast-Growing Industry" by W. W. McCarty, Ross-Martin Co., Tulsa, was printed in the October issue of BUTANE-PROPANE News, Page 121.

Conferences and committee meetings were held during hours when convention talks were not scheduled. Among these was a conference of state regulatory officials headed by Stan Beske, Kay Gases Co., Chicago. It resulted in the formation of a plan to draft a model safety regulation that would be suitable for adoption by states having no regulations affecting the







H. G. BAUR

LP-Gas industry. When this model regulation has been prepared as a result of analyses of existing regulations in various states, it will be reviewed by the safe practices committee before final adoption.

Attending the meeting of the regulatory officials, in addition to Mr. Beske, were M. L. Blair, Arkansas chief inspector, Little Rock; W. U. Moss, LP-Gas Commission, Baton Rouge, La.; Blaine M. Book, chief boiler inspector, Harrisburg.





Left: H. F. Browne, U. S. Bureau of Mines, Dallas, and (right) K. R. D. Wolfe, Fisher Governor Co., Marshalltown, Iowa, two of the program speakers.









Four of the newly elected directors of the NBPA, voted into office at the St. Louis convention. (Left to right): Roy L. Weinman, Modern Appliance Co., Denver, Colo.; J. D. Barton, Valley Gas Co., West Point, Ga.; Fred Black, Fred Black, Inc., Belton, S. C.; Joe Herrmann, Joe Herrmann's, Inc., San Antonio, Fla.

Pa.; H. F. Browne, U. S. Bureau of Mines, Dallas; G. H. Yandell, East St. Louis; Roy Weinman, Denver; and Al Wouelfle, Bloomington, Ill.

Other conferences were held by the state association presidents and the safe practices committee.

NBPA Board of Directors-1947-1948 John I. Bales, Springfield, Mo. John Bares, Little Falls, Minn. H. G. Baur, Webster Groves, Mo. Fred Black, Belton, S. C. Stan Beske, Chicago, Ill. J. D. Barton, West Point, Ga. R. J. Coughlin, Minot, N. D. Forrest Fram, Chagrin Falls, Ohio. Charles Grau, Rhinelander, Wis. C. W. Guy, Baton Rouge, La. Leland L. Harms, Allison, Iowa. Joseph Herrmann, San Antonio, Fla. John L. Locke, St. Paul, Minn, J. E. Price, Miami, Fla. Harry W. Richards, Reed City, Mich. John M. Robinson, Woodworth, La. Earl C. St. Cyr, Marquette, Mich. R. N. Short, Franklin, Ky. Harry H. Torbit, Pueblo, Colo. Roy Weinman, Denver, Colo. J. H. Winton, Beaumont, Texas.

The members of the convention committee, entitled to much credit for the success of the St. Louis meeting, were H. G. Baur, St. Louis; S. Beske, Chicago, and Earl C. St. Cyr, Marquette, Mich.

President Robinson presided at the first day's meeting and Forrest Fram, Fram Heating Co., Chagrin Falls, Ohio, and J. E. Price, Southeastern Natural Gas Corp., Miami, Fla., presided respectively on the next two days of the meeting.

#### G. Brefeld & Son Add Storage To Aviston, Ill., Plant

The G. Brefeld & Son Hardware Co., Aviston, Ill., has recently completed a propane bottling plant which will enable them to handle their customers' needs in their own establishment.

The firm has also recently installed another storage tank to their bulk plant and anticipate increasing storage a second time in the near future.

The bottled gas operations of this firm will be handled under the name of Brefeld Gas Co.

## Union Oil Co. Stages More Fire Fighting Demonstrations

Realistic fire-fighting demonstrations that actually allow those attending meetings to participate are being continued throughout California by C. H. Van Marter, Union Oil Co., Training and Safety representative. Last month Mr. Van Marter's crew included extinguishment of LP-Gas fires on programs at Ontario, Oct. 9, and at San Fernando, Oct. 14.

The Union Oil show is supplemented by the Snowden Chemical Co., distributors of Du-Gas equipment. The Du-Gas extinguisher, as operated by Joe Holmes of the Snowden organization, headlines the performance.

At the Ontario demonstration, Mr. Van Marter was also assisted by Fire Chief A. R. Moyer and his fire department. Every conceivable type of fire was started and extinguished, includ-



Assisting Union Oil expert, C. H. Van Marter, are (left to right): L. H. Hopkins, assistant chief, Ontario fire department; W. R. Sidenfaden, Home Gas Co., Ontario; A. R. Moyer, Ontario fire chief, and Joe Holmes, Snowden Chemical Co., Modesto.



Extinguishing a "Christmas tree" LP-Gas fire with "Dugas."

ing LP-Gas, wood, trash and oil conflagrations.

Previous to the field demonstration, Mr. Van Marter presented the essence of the Union Oil Co.'s fire-fighting training program at a 2-hour lecture session. His basic objectives in safety education against fire damage: (1) to teach fear of fire; (2) to teach respect for fire; (3) to train in fire extingishment.

#### NGAA 1948 Convention Set For Mar. 24-26 at Fort Worth

To avoid conflict with dates of other conventions scheduled for next spring, the Natural Gasoline Association of America board of directors has set March 24-26 as the time for its 1948 convention. It will be held at the Texas hotel in Fort Worth.

Reservations may now be made directly at four hotels which are holding space. Besides the Texas hotel, the Blackstone, the Westbrook, and the Worth are hotel choices open to NGAA members planning to attend the meeting. It is not too early to make reservations.

## 1946 Sales of LP-Gas Increase 34%

OMESTIC deliveries of liquefied petroleum gases sold for fuel, chemical raw material and synthetic rubber components increased from 1,276,766,000 gal. in 1945 to 1,705,-282,000 in 1946—a gain of 34% compared with an expansion of 20% in 1945 over 1944. It is believed that the volume of domestic sales in 1946 would have been even greater had more pressure tank cars and trucks been available for distribution purposes and had additional equipment for the use of these liquid gases been more readily obtainable.

Exports of liquefied petroleum gases increased from 26,059,000 in 1945 to 49,091,000 in 1946—a gain of about 88%, according to the Bureau of the Census, United States Department of Commerce.

The outstanding growth of this trade in 1946 compares with an increment of 79% in 1945 over 1944.

The totals for the different uses of liquefied petroleum gases rose sharply in 1946, except that for internal - combustion - engine fuel, which showed only a small gain and the quantity for industrial fuel which dropped slightly. Sales of liquefied petroleum gases for domestic or household fuel have more than doubled since 1943 and the 1946 total of 766,150,000 gal. was 44% over the 1945 demand of 533,262,000. This expansion compares with gains of 20% in 1945 and 29% in 1944.

Deliveries of liquefied petroleum gases for domestic fuel made up 45% of the total for all uses in 1946, a slightly larger proportion than the 42% reported for both 1944 and 1945. The purchases of liquefied petroleum gases by manufactured - gas companies have mounted steadily in recent years and the volume reported for 1946 -86,660,000—was 61% over the 1945 quantity of 53,849,000 and nearly double the 1944 total. Sales of liquefied petroleum gases credited to manufactured-gas companies represented 5% of all deliveries in 1946 in contrast to 4% of the total for both 1944 and 1945.

Over a third of all sales of lique-

The total quantity of LP-Gases sold during 1946, according to this survey prepared by A. T. Coumbe, petroleum economics division, economics and statistics branch of the U. S. Bureau of Mines, includes material delivered for synthetic rubber components. A figure released in the January 1947, issue of BUTANE-PROPANE News, by G. G. Oberfell and R. W. Thomas, Phillips Petroleum Co., Tulsa, estimated the increase of LP-Gas sales for 1946 at 33.5%, just onehalf of 1% off the 34% official figure issued by the Bureau of Mines. The totals compiled by Mr. Oberfell and Mr. Thomas did not include material delivered for synthetic rubber components .- Editor.

fied petroleum gases were sold for non-fuel uses in 1946. The quantity reported for synthetic rubber components increased from 208,787,000 gal. in 1945 to 289,442,000 in 1946, a 39% gain, while in addition the total indicated for chemical raw material of 307,655,000 gal. was 37% above the 1945 demand of 224,291,000 gal. and more than double 1944 requirements.

It is believed that the demand for liquefied petroleum gases for use in the manufacture of synthetic rubber probably reached a "peak" volume in 1946, as the output of synthetic rubber is being curtailed as more natural rubber becomes available. It should be added, however, that the greater shrinkage in the demand for raw material going into synthetic rubber has been in the alcohols from agriculture sources because of their higher cost rather than in liquefied gases derived from petroleum and natural gas.

The volume of sales of liquefied petroleum gases for internal-combustion-engine fuel has expanded very little in recent years, due both to wartime regulations and equipment shortages, and the 1946 quantity of 96,222,000 gal. is only 3% above the 1945 total of 93,340,000 gal. Furthermore, the liquefied petroleum gases sold for motor fuel have declined from a 9% proportion of total deliveries for all uses in 1944 to a 7% share in 1945 and a 6% share in 1946.

The use of liquefied petroleum gases for industrial fuel declined from 163,-121,000 gal. in 1945 to 159,115,000 in 1946, a 3% shrinkage compared with a slight gain in 1945 over 1944.

The proportion of butane in the total sales of liquefied petroleum gases has remained just below 26% in recent years, while some slight variations are noted in the shares for propane and butane-propane mixtures.

Butane sold as liquefied petroleum gas increased from 325,140,000 gal. in 1945 to 438,439,000 in 1946—a gain of 35% compared with a 19% expansion in 1945 over 1944. All uses of

TABLE 1. SALES OF LIQUEFIED PETROLEUM GASES IN THE UNITED STATES 1940-46

				1940 Thousands		2)	
Yea	ar	Butane	Propane	Butane- propane mixtures	Pentane	Quantity	Total percentage increase over previous year
1940		77,056	109,216	123,348	3,836	313,456	40.2
1941		112,244	126,969	219,252	4,387	462,852	47.7
1942		128,560	150,511	301,917	4,452	585,440	26.5
1943		140,122	218,273	312,683	4,155	675,233	15.3
19441		122,870	324,355	450,846	(4)	898,071	33.0
$1944^{2}$		273,116	335,884	451,156	(4)	1,060,156	
1945		325,140	444,581	507,045	(4)	1,276,766	20.4
$1946^{3}$		438,439	548,827	718,016	(4)	1,705,282	33.6

<sup>&</sup>lt;sup>1</sup>Without synthetic rubber components for comparison with 1943. <sup>2</sup>Includes material delivered for synthetic rubber components. <sup>3</sup>Subject to revision. <sup>4</sup>Not available.

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Table II. Sales<sup>1</sup> of Liquefied Petroleum Gases by Uses and Regional Distribution, 1945-46.

(Thousands of gallons)

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Total—All 1946 <sup>2</sup> Percent of		1945 Percent of
	Total	total	Total	total
Domestic:	766,150	44.9	533,262	41.8
Pacific Coast area	118,027	6.9	93,486	7.4
All other areas	648,123	38.0	439,776	34.4
Gas manufacturing:	86,660	5.1	53,849	4.2
Pacific Coast area	19,594	1.1	13,900	1.1
All other areas	67,066	4.0	39,943	3.1
Industrial fuel:	159,115	9.3	163,121	12.8
Pacific Coast area	20,208	1.2	14,154	1.1
All other areas	138,907	8.1	148,967	11.7
rubber components:	289,442	17.0	208,787	16.3
Pacific Coast area	21,440	1.3	9,204	0.7
All other areas	268,002	15.7	199,583	15.6
Chemical manufacturing:	307,655	18.1	224,291	17.6
Pacific Coast area	20,528	1.2	16,965	1.3
All other areas	287,127	16.9	207,326	16.3
nternal-combustion-				
engine fuel:	96,222	5.6	93,310	7.3
Pacific Coast area	41,299	2.4	39,474	3.1
All other areas	54,923	3.2	53,866	4.2
ll other uses:	38		116	
Pacific Coast area	20		22	
All other areas	18		94	
Cotal sales:1	,705,282	100.0	1,276,766	100.0
Pacific Coast area	241,116	14.1	187,211	14.7
All other areas1	,464,166	85.9	1,089,555	85.3
ercent of butane-propane nixtures in total LP-Gas	,			
sales				

<sup>&</sup>lt;sup>1</sup> In continental United States only. <sup>2</sup> Subject to revision.

butane showed gains in 1946 except quantities delivered for domestic and internal-combustion-engine fuels.

Butane delivered for domestic or household fuel has fluctuated from 27,565,000 gal. in 1944 to 52,866,000 in 1945 and then down by 14% to 45,285,000 gal. in 1946. The increasing pressure for butane as raw material

used in the manufacture of motor fuel, synthetic rubber and chemical products has apparently forced distributors to turn more to propane and butane-propane mixtures to satisfy the domestic fuel demand.

Sales of butane to manufacturedgas companies increased noticeably from 15,637,000 gal. in 1945 to 25,-



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682,000 in 1946-a 64% gain.

Reported deliveries of propane of 548,827,000 gal. in 1946 were 23% over the 1945 demand of 444,581,000 gal. Most of the propane is sold for domestic or household fuel and this demand increased by 44% from 216,-415,000 gal. in 1945 to 312,240,000 in 1946.

Manufactured - gas companies are using rapidly increasing quantities of liquefied petroleum gases in their operations and nearly half of their requirements are for propane, the total of which nearly doubled from 22,323,000 gal. in 1945 to 41,199,000 in 1946.

Butane-propane mixtures reported in the survey increased from 507,045,000 gal. in 1945 to 718,016,000 in 1946—a 42% gain or a greater expansion in volume than that shown for either butane or propane. Important quantities of butane-propane mixtures are also used as raw material for the manufacture of chemicals and the volume of this demand has expanded greatly from less than 40,000,000 gal. in 1943 to 131,288,000 in 1945 and 185,284,000 in 1946. Liquefied petroleum gases consumed as motor fuel

are predominantly butane - propane mixtures,

About 3% of the butane-propane mixtures sold is credited to manufactured-gas companies and this demand has steadily increased in recent years to 19,779,000 gal. in 1946—a 25% gain over the 1945 total of 15,889,000 gal. A similar proportion of "mixtures" is also used at present as fuel by industrial plants and the 1946 quantity of 19,982,000 gal. compares with 16,038,000 under this classification in 1945 total.

The relative proportions of the different liquefied petroleum gases sold to satisfy the several uses have changed in recent years as competitive demands, especially for butane and "mixtures," have developed. If butane sold for synthetic rubber components is omitted, in order to put the more recent sales of liquefied petroleum gases on a comparative basis with those prior to 1944, we find that butane in the annual deliveries has dropped steadily from a 24% share in 1941 to a 12% proportion in 1946.

The part of the total demand satis-

TABLE III.	LIQUEFIED	PETROLEUM	GAS	SALES	BY	CALIFORNIA	MARKETERS
			1946				
		(Thousan	ids of	gallons,	)		

(Thousands of gallons)				e-Propone				
Butane		Pro	pane	Mixtures		Т	Total	
1945	1946	1945	1946	1945	1946	1945	1946	
30	384	35,545	47,486	57,911	70,157	93,486	118,027	
		1,106	3,848	12,800	15,746	13,906	19,594	
		4,861	9,193	9,293	11,015	14,154	20,208	
							,	
9,204	21,440					9,204	21,440	
8,162	9,462	8,255	9,500	548	1,566	16,965	20,528	
		3,563	3,368	35,911	37,931	39,474	41,299	
				22	20	22	20	
17,396	31,286	53,330	73,395	116,485	136,435	187,211	241,116	
	9,204 8,162	Butane 1945 1946  30 384 9,204 21,440 8,162 9,462	Butane         Property           1945         1946         1945           30         384         35,545             1,106            4,861           9,204         21,440            8,162         9,462         8,255            3,563            3,563	Butane         Propane           1945         1946         1945         1946           30         384         35,545         47,486             1,106         3,848             4,861         9,193           9,204         21,440             8,162         9,462         8,255         9,500            3,563         3,368	Butane         Propane         Mi           1945         1946         1945         1946         1945           30         384         35,545         47,486         57,911             1,106         3,848         12,800             4,861         9,193         9,293           9,204         21,440              8,162         9,462         8,255         9,500         548             3,563         3,368         35,911                22	Butane         Propane         Butane-Propane Mixtures           1945         1946         1945         1946         1945         1946           30         384         35,545         47.486         57,911         70,157             1,106         3,848         12,800         15,746             4,861         9,193         9,293         11,015           9,204         21,440               8,162         9,462         8,255         9,500         548         1,566             3,563         3,368         35,911         37,931               22         20	Butane         Propane         Butane-Propane Mixtures         T           1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1946         1945         1948         194	

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One-Piece Porcelain Front Frame—Sanitary and rigid. Also one-piece porcelain enamel seamless top.

AMERICA'S EASIEST RANGE TO KEEP CLEAN

# For More Gas Range Sales... MORE L.P. GAS SALES

The trade is saying—"You'd think those Caloric people were in the L.P. Gas business."

We are! Not as producers or dealers, but right behind every one of you to sell more installations, more gas and more ap-

First, we offer Ultramatic Caloric Gas Ranges that were pliances to use that fuel. inspired in design by the needs of L.P. Gas users . . . with specially engineered burners and valves to give your customers the trouble-free service, better cooking, results and convenience features they want.

Next, we promote L.P. Gas and Ultramatic Caloric L.P. Gas Ranges in hard-hitting national consumer and farm magazine advertising . . . because we realize that, to sell Caloric L.P. Gas Ranges, we must first sell L.P. Gas and

No wonder progressive dealers and producers see the value its conveniences. in Ultramatic Caloric. If you sell fine gas ranges, you'll

Caloric Stove Corporation, Widener Building, Phila. 7, Pa. want more details.

# 147,000,000 Selling Messages to 3 out of 4 Potential Customers

12 months a year CALORIC's Nationwide Advertising is building a big market

for the Ultramatic CALORIC through

LADIES' HOME JOURNAL McCALL'S AMERICAN HOME BETTER HOMES & GARDENS

GOOD HOUSEKEEPING SMALL HOMES GUIDE WOMAN'S HOME COMPANION

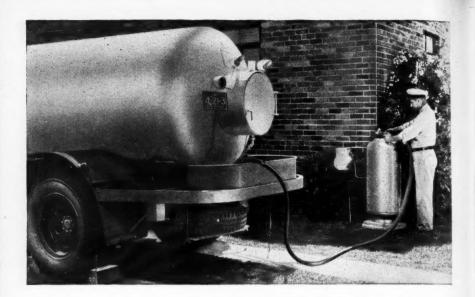
L.P. Gas Range Advertising FARM JOURNAL COUNTRY GENTLEMAN SUCCESSFUL FARMING

HOUSEHOLD PROGRESSIVE FARMER

Ultramatic

Write for free reprint of consumer ad to display in your showroom.

THE L.P. GAS RANGE YOUR CUSTOMERS WANT



# Want to speed up delivery service?

There's an easy way to do it. Just use Monarch Propane-Butane Hose—built especially for the job. It will add to your profits, because it's "Job-Engineered" by Hewitt to handle liquefied petroleum gases with speed, efficiency and safety.

You can use Monarch Propane-Butane Hose to move LP gas from bulk storage to tank car ... or to cylinders... or from tank trucks to home storage.

A specially compounded nonporous tube resists the penetrating action of highly volatile liquid gases. Hose breakdowns are virtually eliminated . . . longer and more useful hose life is assured.

In addition, a special fabric carcass enables the hose to withstand several times the pressures required for LP gas delivery service.

Why not use it to speed up your delivery service? For details write Hewitt Rubber Division, 240 Kensington Ave., Buffalo 5, N. Y.



# **HEWITT RUBBER**

HEWITT-ROBINS INCORPORATED
HDUSTRIAL HOSE • BELTING • PACKING

Monarch Propane-Butane Hose

fied by propane has increased almost correspondingly from 27% in 1941 to 37% in 1946. In other words, there has been a pronounced shift from butane to propane in sales of liquefied petroleum gases, if quantities diverted for synthetic rubber are not taken into consideration. The percentage for butane-propane mixtures in the total annual sales of liquefied petroleum gases has fluctuated slightly in recent years but has averaged about 50% of all deliveries.

If the proportions for the different liquefied petroleum gases sold to satisfy the different uses are reviewed, it is found that butane made up about 6% of the total for domestic or household uses in 1946 against a 10% share in 1945 and 6% in 1944.

The propane in the domestic item was 38% in 1944 and 41% for both 1945 and 1946, while butane-propane mixtures have varied from 56% of the total in 1944 to 50% in 1945 and then up to 53% of domestic fuel requirements in 1946. The manufactured-gas industry is taking relatively more propane and less of both butane and butane-propane mixtures in recent years.

The American Gas Association is credited with the following statistics regarding the distribution of liquefied petroleum gases by manufactured-gas companies:

"Liquefied petroleum gas, as of May 1947, was being delivered through mains to 187,000 consumers in 306 communities by 157 companies in 36 states.

"Butane-air gas and propaneair gas with heating value ranging from 520 to 1600 Btu per cu. ft. was supplied to 238 communities in 35 states.

"A mixture of undiluted butane

and propane gas with heating value of 2800 to 3000 Btu per cu. ft. was supplied 17 communities in Arizona, California, and New Mexico.

"Undiluted propane gas with heating value of 2515 to 275 Btu per cu. ft. was supplied 51 communities in Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Jersey, North Carolina, North Dakota, Virginia, and Wisconsin."

The survey covering sales of liquefied petroleum gases in the Pacific Coast marketing area (California, Oregon, Washington, Arizona, and Nevada) made by E. T. Knudsen of the Los Angeles office of the Bureau of Mines, shows deliveries of 241,116,000 gallons in 1946 — a gain of about 29% over the 1945 quantity of 187,211,000 gal. The liquefied petroleum gases marketed on the Pacific Coast made up about 14% of the national total in 1946 compared with a 15% share in 1945. Distributors operating in all other parts of the country sold 1,464,166,000 gallons of liquefied petroleum gases in 1946 or 34% over the 1945 volume of 1,089,555,-000 gallons.

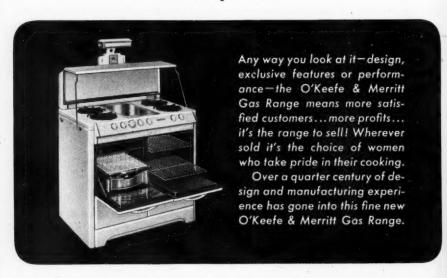
A breakdown of Pacific Coast territory sales will be found in Table III.

Records of the Bureau of the Census, United States Department of Commerce, show exports of liquefied petroleum gases of 49,091,000 gal. in 1946—a gain of 88% of the 1945 total of 26,059,000 gal. Most of these shipments were credited into Canada and Mexico for both years, although France is shown to have received an initial item of 1,941,000 gal. in 1946.

# This sign on your window...



# means more satisfied customers more profits!



O'KEEFE & MERRITT CO. 3700 E. Olympic Blvd., Los Angeles 23, Calif.

# Salt Lake Plays Host to LPGA Guests

ITAH dealers, recently organizing themselves into a state association, played host-and a generous host-to the entire West and particularly to the board of directors of the Liquefied Petroleum Gas Association in September. The place was Salt Lake City.

In a three-day gathering, start-



Orson P. Wright



trymen. Officially, it was a combination meeting of the three Western LPGA districts - Mountain, North Pacific and South Pacific, including Arizona.

Orson P. Wright, Rocky Mountain Bottled Gas Co., Salt Lake City, Utah, state chairman for the LPGA, presided. A carefully prepared program gave visiting dealers much important information.

Morning talks were made by officers of the LPGA, including Ty H. Ransome, president: Howard White, executive vice president, and Don McNary, West Coast secretary, with Fred La Frentz, president of the Utah state association, speaking on the "Development of the LP-Gas Industry in Utah," and Frank Fetherston, LPGA technical vice president, discussing safety.

In the afternoon, Ken Rugh, Phillips Petroleum Co., pinch hitting for John Knox Smith, handled the









Left to right: LPGA officers-Ty Rans me, president; F. R. Fetherston, vice president; Arthur C. Kreutzer, secretary, Jas. D. Moyle, host.

subject "Requirements for a Practical Safety Program," followed by John Pankow, Detroit - Michigan Stove Co., revealing the "Outlook for LP-Gas Ranges and Other Appliances."

Bob Johnson, representative-atlarge of California's "Pacific Rural Press," presented figures to show what may be the future of the LP-Gas industry in the farm market. (See Page 157.)

Approximately 125 industrymen registered for the one-day convention.

The second and third days were

devoted to the second quarterly meeting of the Liquefied Petroleum Gas Association board of directors. To enable visiting dealers to see how the board conducts its meeting and to become better acquainted with some of the industry problems to be met, the board held open sessions.

Of paramount interest was the board's decision to hold its 1948 annual convention in Sacramento, Calif., and to add a consumer show to the regular program. (For details see Page 103.)

Permission was given the Utah state association to join the South Pacific district.

Board members in attendance, totaling more than 45, came from all sections of the country, justifying the plan to hold quarterly meetings in various localities in order to further more intimate acquaintanceship and understanding between the association and its members.

James D. Moyle, Wasatch Oil Refining Co., Salt Lake, was host at a luncheon given the board members on September 24.

#### WHAT THE LPGA BOARD DID

Selected Sacramento, Calif., for 1948 convention.

Discontinued old publicity program.

Endorsed new "package" advertising plan for dealers.

Created new International section.

Approved Utah state association affiliation with South Pacific district.

Accepted into membership Louisiana, Kentucky, and Pennsylvania state associations.

Considered insurance program.



IT'S NEW!
IT HAS EYE APPEAL!
IT'S PRICED SO LOW!



Adapters available: 2-5/8"
3-5/8" 4" 6"

The new Roney Bottled Gas Regulator #R60 at least 50 cu. ft. (over 100,000 B.T.U.) per hour capacity with 11" water column delivery pressure. 1/4" IPS inlet, 3/8" IPS outlet. Ample capacity for many types cylinder installations. Small, compact (3-1/4" dia.). Rugged construction. Listed by National Board Fire Underwriters. Let us quote on your requirements. The price will surprise you.

L.C. RONEY INC.

511 South Redondo Blvd., Inglewood, Calif.

# Where and How to Fill Consumer Tanks

By O. L. GARRETSON
Sacra Brothers Co., Roswell, N. M.

# In Two Parts-Part I

Some dealers have found their supply of butane and propane will not permit the sale of addi-

tional domestic space heating equipment. In spite of this fact, such dealers can aggressively expand their business and make both additional equipment and fuel sales, if they are confined to strictly summer uses such as



O. L. GARRETSON

most agricultural applications.

It does not appear likely that many dealers can completely balance their winter and summer loads by finding new summer uses. Much progress can be made, but you are still going to need to rely on the customer's storage tank to finish the job. Larger storage tanks for each new customer (more than a 500-gal. tank if they plan to heat) and additional tanks for existing users, must be not only your sales policy; it should be followed almost without exception.

It will take years to correct all

the errors of the past decade, but there are remedial steps to be taken that won't cost either you or your LP-Gas customers a cent.

#### Study Entire Year's Needs

First, make a study of your customer's fuel use throughout the year, then plan a fuel purchase and delivery program that will make the maximum use of your customer's storage.

Storage capacity at a customer's home is for two purposes. First, it permits infrequent fuel deliveries, and secondly, it decreases the winter fuel purchases of the dealer. Surprising as it may seem, careful analysis will show the same

At the meeting of the Oklahoma Liquefied Petroleum Gas Association in Oklahoma City in September, Mr. Garretson delivered a two-part talk to dealers which was in substance the same speech as presented a month earlier before the New Mexico Liquefied Petroleum Gas Association meeting.

The paper naturally falls into two parts, one covering methods of maintaining fuel for winter users, and the other discussing industrial and commercial possibilities for Southwest dealers.

The first of these appears herewith. The second part will be published next month.

—Editor.

when the choice is in Balance...

Underwriters Approved

# TAKE THE TAYLOR

MAGNETIC

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FLOAT GAUGE
FOR BUTANE OR
PROPANE GAS

Large, easy to read dial face with breakresistant plexiglass crystal. Moisture is sealed out.

Steel float callapsetests exceed 1,000 pounds per square inch.

Float rod is cast into gear and counterweight assembly.

Gear is one piece with shrouded teeth to prevent possible damage in assembly. Works on brass bearing. Alnico magnetic peinter and Alnico magnetic drive. Pointer is mounted on bronze bearing set on stainless steel pivot post.

Tubing is of strong aluminum alloy. Light in weight but very rugged.

The drive shaft is of strong aluminum alloy and is corrosion resistant.



Write for price list.

TAYLOR SALES

FIG. I.

Assuming all deliveries are made on the second day of the month, table shows number of gallons.

	Emptu	tank	space	below	maximum	filling	maint.
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Filling Schedule	Once per Year 1200 gal. every Oct. 31st	Twice per Year 600 gal. every six month	Four per Year 300 gal. every 3 mo.	Six per Year 200 gal. every 2 mo.	Twelve Per year 100 gal. every month	365 per year 3 1/3 gal every day
Nov. 2	0	0	0	0	0	0
Dec. 1	140	140	140	140	140	40
Jan. 1	340	340	340	340	240	140
Feb. 1	536	536	536	336	336	236
Mar. 1	696	696	396	496	396	296
April 1	826	826	526	426	426	326
May 1	906	906	606	506	406	306
June 1	956	356	356	356	356	256
July 1	996	396	396	396	296	196
Aug. 1	1036	436	436	236	236	136
Sept. 1	1076	476	176	276	176	76
Oct. 1	1122	522	222	122	122	22
Nov. 1	1200	600	300	200	100	0
Nov. 2	0	0	0	0	Λ.	0

storage capacity cannot be used to serve both purposes.

Adding a 500-gal. tank at a customer's home will reduce the frequency of delivery and lessen your winter fuel peak requirements, but a 250-gal. tank might have accomplished one or the other of these jobs, alone.

For example, consider an average customer that uses 40 gals. of gas per month during the summer and a yearly total of 1200 gals. If that customer is delivered 100 gals. of fuel the first day of every month throughout the year (see Fig. 1), a 426-gal. gas capacity storage must be provided to prevent a "runout" during the late winter. If gas was delivered on a schedule of 200 gals. every 2 months, a 506 net capacity tank would be required, and for a 3 months schedule, that is a delivery every 90 days, over 600 gals. storage would be required

if fuel deliveries are to be uniformly spaced and of uniform amount throughout the year.

Carrying this to two extremes, if the customers are served twice a year, with equal quantities delivered each time, most of them would need over 900 gals, storage. Conversely, if you pumped 3 1/3 gals, into each customer's tank every day, only 325-gal. storage capacity would be needed at each location to furnish the excess fuel needed during the winter over what is delivered. The storage needed to balance the load, therefore, is 325 gals., and all additional storage capacity is necessary to permit a reasonable quantity to be delivered each trip.

If you wish to deliver 300 gals. per trip, increase the storage another 300 gals. to a total of 625.

The storage for other delivery quantities may be figured the same



DEPENDABLE SERVICE

Reliance Regulators assure absolute control of steady outlet pressure to L-P gas users. They are safeguarded by a safety seal and installed with automatic control of multiple cylinder assemblies. Two-step reduction eliminates possibility of high pressures getting into appliances.

Type MC Regulator with 2"
Type H Secondary Regulator. Capacity up to 6600 cu. ft. of Vapor per hour.

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AMERICAN METERS RELIANCE REGULATORS

RELIANCE REGULATOR CORPORATION



 Did you know Magic Chef is introducing the NEW (Automatic-SUPER CAPACITY) 400
 Series Magic Chef with one of the most powerful introduction campaigns in years?
 ADS will appear in five leading national magazines. LP-Gas is being featured in this advertising.

 YOU CAN PROFIT with this BIG CAMPAIGN by AGGRES-SIVELY MERCHANDISING Magic Chef IN YOUR STORE

See your American Stove Company representative for details on the New 400 Series Magic Chef. American Stove Company, New York; Philadelphia; San Francisco; Chicago; Cleveland; Atlanta; St. Louis.

Fig.	2.	ROSWELL,	N.	M.,	DOMESTIC
		FUEL REO	UIR	EME	NT

Jan.	773	156	196	
Feb.	585	120	160	
Mar.	459	90	130	
April	199	40	80	
May	50.	10	50	
June	2	0	40	
July	0 -	0	40	
Aug.	0	0	40	
Sept.	26	6	46	
Oct.	191	38	78	
Nov.	512	100	140	
Dec.	781	160	200	
Total	3578	720	1200	

Maximum Year: 4475 degree days, or 25% over average.

LP-Gas used for heat, for New Mexico-.2 gal. per degree day.

5 degree day per gallon.

Many other areas require .25 gal. per degree day.

way. The above figures are all in terms of net gas capacity, and must be further increased by the amount of gas that should be in a tank at the time it is scheduled for a refill. This approach—considering part of the customer's storage serving one purpose and part of it serving another—appears to greatly simplify the whole problem when studying customer storage requirements.

All these figures are based on actual records for an area where 3600 degree days is the heating requirement. The Chart in Fig 2 is based on heating conditions in Roswell, N. M.

It might be well to mention here that weather bureau records show some winters require 25% more fuel for heating than is needed for an average year. Therefore, 200 to 225 extra gallons of gas must be in each customer's tank when winter starts, or it must be available from your supplier. Whenever you

figure your winter fuel needs, always consider the relative severity of climates.

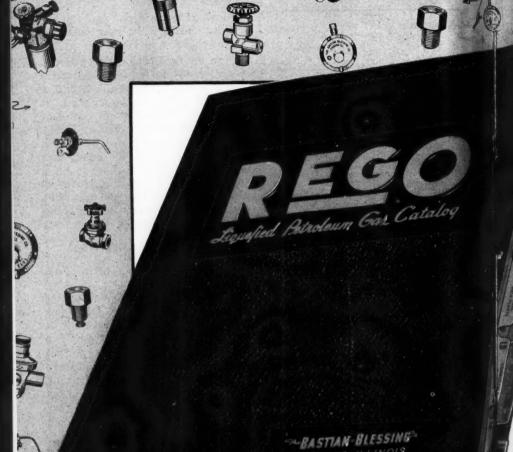
The figures previously mentioned show that infrequent deliveries substantially increase the tank size required for a balanced load. It also shows that if your customer tanks aren't as large as desirable, they should be serviced quite often during the winter. Off hand, that statement appears so obvious it is stupid. What it really indicates is that small deliveries—partial refills—are of great benefit in stretching the winter fuel supply.

## Curtail January Deliveries

It isn't good business to purchase and deliver fuel in January, when many people are about to freeze because of fuel shortage. Half of that fuel may stay in a customer's storage tank until hot weather. Plan your business so that all your customer and yard storage is about empty by Mar. 15; and don't be in such a heck-of-a-hurry with your spring fill-up.

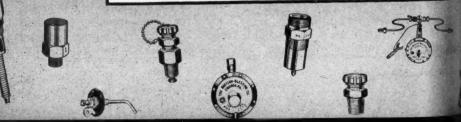
Wouldn't 500 empty tanks to fill every May and June improve your business a lot? Entering the slack summer period with all tanks about empty should give you as much pride and satisfaction as you get from having them all full in November.

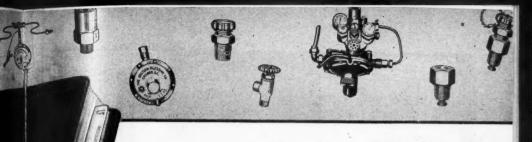
To help balance your load, it will always be practical and reasonably economical to press the service of your delivery trucks to the limit, and even place stand-by trucks in service during the winter months. Assume a dealer, for example, has



CHICAGO, ILLINOIS

PIONEER AND LEADER IN THE DESIGN AND AM





# This Is REGO'S BIG, Complete Catalog of LP Gas Equipment

# Here Is Why the REGO Catalog Is the Most Comprehensive in the Entire Industry:

... because it is prepared in the RegO tradition of service to the LP Gas Industry.

... because the RegO line, the one truly complete line of LP Gas control equipment, is made up of literally hundreds of individual items.

... because this RegO catalog is more than a mere listing of available equipment . . it contains:

- (1) Complete data on recommended applications, general specifications, including capacity tables, flow charts and similar information where applicable.
- (2) Extensive information on the design, construction and operation of LP Gas equipment.
- (3) Each catalog section contains excerpts from NBFU Pamphlet No. 58 covering regulations applicable to the type of equipment described.

The RegO catalog is kept up-to-date by the issuance of timely revisions and special bulletins. This feature is particularly valuable to distributors and dealers, who must keep abreast of new developments and changing conditions within the industry.

The RegO catalog is available to qualified distributors and dealers. If you desire to receive it, you are invited to write The Bastian-Blessing Company. A brief questionaire, for the purpose of establishing your eligibility to receive the catalog, will be sent you promptly.

## And Here Is What Goes to Make Up the REGO Catalog

SECTION LA: Outfits for cylinder and cash and carry systems. Manifold blocks, manual and automatic throwover manifolds. Pigtails, cash and carry cylinder valves. SECTION LB: Multivalve outfits for underground and aboveground bulk delivery systems.

SECTION LC: Cylinder charging manifolds, loading hose assemblies and adapters.

SECTION LD: Internal combustion engine equipment.
SECTION LE: Cylinder, globe, angle and tank car valves.

SECTION LF: Low pressure and high pressure regulators. SECTION LG: Filler, vapor and excess flow, double

check filler, excess flow and automatic cutoff valves. Hose couplings and unloading adapters.

SECTION LH: Pop action and diaphragm type safety relief valves. Fuse plugs.

SECTION LJ: Slip tube, fixed tube and rotary liquid level gauges (Rotogages). Gauge glass assemblies, pressure gauges and low pressure test sets.

SECTION LK: Miscellaneous fittings, such as expansion coils, couplings, swivel couplings, hose nipples, etc.

SECTION LM: Price list and index of all standard assemblies and replacement parts.

ACTURE OF PRECISION EQUIPMENT FOR USING AND CONTROLLING LP GASES

# The BASTIAN - BLESSING Ompary

4201 West Peterson Avenue

Chicago 30, Illinois

#### POSITIONS OPENI

RegO Sales Department is seeking experienced LP Gas men for both inside and outside positions in several territories. Address Sales Manager, giving full particulars.









OUR LABORATORY
WORKED JUST FOR YOU

TO DEVELOP THIS .

Gasket And Joint Sealing Compound For L-P Gas Installations



# TiteSeal

LEADERSHIP BUILT ON PERFORMANCE

When the special requirements of the L-P Gas Industry demanded a special grade of sealing compound—TITE-SEAL made it, and with it built a reputation throughout the industry for unexcelled performance.

TITESEAL meets all L-P gas requirements from producing well to appliance installation—wherever there is a need for leakproof joints, connections, flanges and metal-to-metal assemblies. It never dries out, therefore permits easy disassembly when necessary. It is positive protection against leaks of all types of L-P gases. Available in 1/4 pints and pint "Brush-in Top" cans, quarts and gallons.

- WILL NOT HARDEN, OR CRACK
- SEALS AGAINST TEMPERATURES
- WITHSTANDS VIBRATION

THE L-P GAS INDUSTRY IS **TiteSeal** BOUND

PLEASE NOTE TOO, THAT YOU CAN OBTAIN YOUR REQUIREMENTS OF TITESEAL FROM ANY OF THE BETTER WHOLESALERS OF PLUMBING, HEATING SUPPLIES, AND EQUIPMENT.



# RADIATOR SPECIALTY COMPANY CHARLOTTE 1. NORTH CAROLINA

- HARLOTTE 1, NORTH CAROLINA
  O RADIATOR SPECIALTY COMPANY OF CANADA LTD. TORONTO
- O GOLDEN STATE RUBBER MILLS LOS ANGELES CALIFORNIA

100 customers with 500-gal. tanks, all of which are full by Nov. 1. If they are not delivered fuel by Jan. 31, all of them will be out of gas. If each is refilled to 90% during January, it will take about 400 gals. per customer or 40,000 gals. of gas. Only 200 gal. in each tank or 20,000 gal. would have carried these consumers through the peak season.

Such delivery practices put an unnecessary strain on our winter supply, although your refiner has met your demand in the past. Making partial refills lengthens the rush period for your delivery trucks and may require an additional truck. The service of one additional truck costing \$5000,-however, is as effective for balancing the load as \$35,000 worth of customer storage. Of course the larger storage reduces delivery cost—and small deliveries increase the costbut the figures show it is never economical to provide such large storage. A balanced load can be obtained without making partial fills during one or two months.

If LP-Gas cost 8 cents per gal. in January, at the refinery, with a price reduction of 1 cent a gal. the first of every month until July, all dealers would think of many clever ways to spread out midwinter fuel purchases. You would also have all tanks ready for a big fill during July.

A similiar pricing system may soon be used in this industry. If so, it should help stabilize the refiners' fluctuating market, and therefore reduce his cost of providing the dealer with an adequate gas supply.

### Fit Deliveries to Capacities

To some, this discussion may appear to be just mathematics and imagination. Others may think it is an argument for continuing with small tanks. Actually it is neither. A 625-gal. net capacity tank is the minimum satisfactory size according to this analysis. Even that large a tank is of little benefit if you don't properly plan your deliveries to take full advantage of the large tank's load-balancing possibilities.

For emphasis, may I repeat that if a customer with a 500-gal. tank needs gas about the last of January, don't deliver 400-gal. to him, as most of it won't be used until after March or April. During midwinter never fill a big tank full—deliver only enough into any tank to last until after the winter peak.

Keeping your winter peak down by filling all tanks in the fall and making partial refills during January and February, is excellent, but

If  $\frac{1}{2}$  the yearly requirement is delivered every six months, delivery must be on Jan. 10 and July 10, or storage capacity must exceed  $\frac{1}{2}$  the yearly fuel use.

Other areas will use more or less gas per degree day. It depends on efficiency of heating system, amount of sunshine, house size, type construction, average wind velocity, variation between day and night temperature, room temperature maintained, etc.

As November is the first month of the winter where over 1/12 the annual fuel requirement is needed, Nov. 1 is the best time to have the tank full. If delivery is made every second month, or every third month, it makes little difference what month these deliveries fall in as far as storage tank size is concerned.

go one step further to help that winter-to-summer ratio. Don't get every tank *full* in March, April and May. Save some empty space to put gas in during June, July and August.

You will be surprised at the results that are possible, by using

your best thoughts and planning, to enter the summer period with all tanks about empty. It is a good substitute for an industrial or commercial summer load. It will also keep the June dust off the cash register, and make you much more popular with your fuel supplier.

# Texans Endorse Pending Law R.R. Commission Amendments

Recommendations regarding amendments to the rules guiding the butane industry in Texas, which were made to the Railroad Commission at a public hearing in Austin on Sept. 29, are now in the hands of the gas utilities division, according to Thelma Freidin, editor, "Texas Butane News."

S. C. McIntosh, director of the division, explained that the proposed changes first made by the commission in July were prompted by a desire to make the rules more specific.

With more than 300 members of the Texas Butane Dealers Association in attendance, the hearing lasted only one morning. This quick action was possible because of the well-done recommendations prepared by the industry committee of the TBDA.

The attending members gave unanimous endorsement to the amendments, and the final form of rules and regulations is expected to be ready within 90 days.

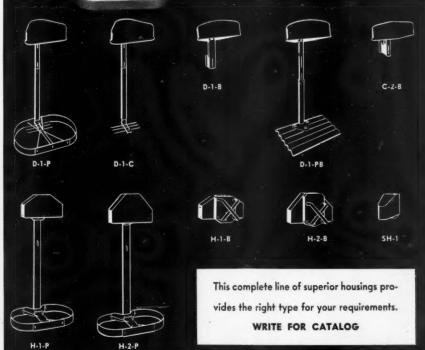


Members of the Texas Butane Dealers Association and other interested industrymen attended the Sept. 29 hearing on proposed law changes before the Railroad Commission.

The D-1-P

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TANDARD
OF THE INDUSTRY IN
BOTTLED GAS HOUSINGS



STAMPINGS, INC. . DAVENPORT, IOWA

# DEEP SEA FRYERS have made me a lot of friends -Dick Keating

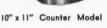


PERFECTLY FRIED FOODS FRIED FASTER AND MORE ECONOMICALLY

COMPLETE LINE to meet each individual need best. Prompt delivery.













18" Square

# SPECIALITIES APPLIANCE CORP, 1220-A W. Van Buren, Chicago 7, Ill.



20" x 20" Heavy Duty



14" Square Twin



# SOMETHING NEW

# LPGA Will Hold Consumer Show with 1948 Convention





C. L. PARKHILL

DON McNARY

Developments of this most important meeting the LPGA has ever attempted will be in charge of Western men, with C. L. Parkhill as chairman of the convention committee and supported by Ty Ransome, president of the LPGA, and Don McNary, West Coast secretary.

Subcommittees are now being appointed and preliminary plans being laid for national and international publicity, details of which will appear in the December issue of BUTANE-PROPANE News.

VENTURING into an entirely new plan for a national industry meeting, the Liquefied Petroleum Gas Association has decided to combine with its 1948 convention a consumer show.

Exhibited equipment and appliances will all be shown in action—from ranges cooking donuts to butane-powered tractors working in the field. And the small town and rural users of LP-Gas, along with dealers from all over the country, will be invited to look in on all of these exhibits.

The place will be the State Fair Grounds at Sacramento, Calif., where facilities are probably unequaled for this kind of meeting and demonstrations. The dates are next May 31 to June 6.

First conceived as a West Coast show by LPGA officials of the Pacific Coast states, the LPGA directors at their quarterly meeting in Salt Lake City in September thought the plan so practical they changed their contemplated convention city and dates to encompass and expand the original arrangements.

#### CALENDAR .

Nov. 6-7-North Eastern District, LPGA. Claridge Hotel, Atlantic City.

Nov. 10-14—American Petroleum Institute. Stevens Hotel, Chicago.

Nov. 17-Montana LP-Gas Association. (Annual Meeting.) Cutbank.

Dec. 3—Wisconsin Liquefied Petroleum Gas Association. Annual Meeting.

Dec. 10—LPGA South Central and South Eastern Sectional Meeting. St. Charles Hotel, New Orleans.

Dec. ? —Illinois LP-Gas Association. Chicago.

March 24-26—Natural Gasoline Association of America. Texas Hotel, Fort Worth.

April 19-20—Florida LP-Gas Association. Spring Conference, Daytona Beach.

May 31-June 6—Liquefied Petroleum Gas Association Annual Convention and International Trade Show. State Fair Grounds, Sacramento, Calif.

June 13-16—Texas Butane Dealers Association, San Antonio.

Sept. 20-22—National Butane-Propane Association, National Convention and Trade Show. Congress Hotel, Chicago.

# **ASSOCIATIONS**

# Harvey Gigstad Named Missouri President

The Missouri LP-Gas Association held its annual meeting in Jefferson City, Oct. 2-3, with K. H. Dickson, 1946-47 president, in the chair, according to Robert W. Hadlick, executive secretary.

Newly elected officers for the coming year are Harvey Gigstad, president, Missouri Midland Gas Co., Kirksville; Monte Taylor, vice president, Joplin Butane Gas Co., Joplin; and A. E. Elkins, treasurer, Elkins Butane Co., Wheaton.

District vice presidents are:

District 1—C. A. Enos, Jr., Cookgas . Plumbing and Heating Co., St. Joseph.

District 2-K. H. Dickson, Uregas Service, Inc., Moberly.

District 3—John Bales, Mo-Hydro Gas Co., Springfield.

District 4-W. A. Schuette, Hausgas, Inc., Washington.

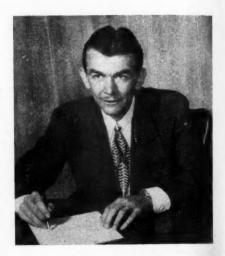
Among papers delivered at the meeting was one by Robert C. Bradley, engineering consultant, entitled, "Safety, a Partner of Every LP-Gas Operator." He emphasized the following points:

Be careful, be alert, be safe, if you want to live happily and prosper.

Avoid

Carelessness — Verily, a careless person is an accident going somewhere to happen.

Thoughtlessness—Not to know is bad enough; not to think is worse.



Robt. C. Bradley

Inexperience—He who "monkeys" with something with which he is not familiar is the biggest "monkey" on earth.

"Short-Cutting"—Doing it an easier way than the approved and accepted practice is dangerous to the "short-cutter" and all his associates.

Chance-Taking—Invariably leads to trouble, perhaps loss of life or time.

Fatigue—Working without rest at the proper time is an accident "breeder."

"Force of Habit" Work—Robots can be repaired; the human "robot" is useless after the first mistake.

Faulty Equipment — Thorough inspection saves lives, dollars, and customers.

Inadequate Maintenance—Is a di-

rect bid for serious accidents to you, your employes, and your customers.

Knowing It All—Is a certain step toward personal injury and business failure. Keep your mind open for new ideas, methods, and business.

# Newly Formed Kentucky LPGA Plans 100 Members by Jan. 1

With 100 members by Jan. 1 as its first goal, an LP-Gas association has been formed in Kentucky. As the Kentucky Liquefied Petroleum Gas Association, the new organization will operate as a division of the Kentucky Petroleum Marketers Association.

Members of the executive com-

mittee elected at the founding of the new state association on Sept. 3 in Louisville were Ronald B. Jones, Airlene Gas Co., Paducah, chairman; R. B. Greene, Midwest Bottle Gas, Cold Spring, vice chairman, and Herbert L. Clay, Kentucky Petroleum Marketers Association and secretary of the KPMA LP-Gas division, Louisville, executive secretary.

Other charter members of the executive committee: Frances L. Holliday, Cumberland National Gas Service, Burnside; R. N. Short, Red Devil Butane Gas Co., Franklin; and James J. Butler Jr., Kentucky Gas Service Inc., Louisville.

Paul Boyd presided at the organizational meeting and C. G. Keesy



Members of the executive committee of the Kentucky Liquefied Petroleum Gas Association. Front row (Left to right): Miss Frances L. Holliday, Cumberland National Gas Service, Burnside; Ronald B. Jones, chairman, Airlene Gas Co., Paducah; R. B. Greene, vice chairman, Midwest Bottle Gas, Cold Spring. Back row: Herbert L. Clay, executive secretary, Kentucky Petroleum Marketers Association and secretary of new division, Louisville; R. N. Short, Red Devil Butane Gas Co., Franklin; James J. Butler, Jr., Kentucky Gas Service, Inc., Louisville.

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News



No Other Heater Can Use The Exclusive and Patented Cirklair Features

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Back of the radiants of a Cirklair Heater are multiple ducts of a patented design. Air flowing through these ducts picks up heat, rises and flows to all parts of a room. This is a functional operation, not mechanical. This constant flowing of air to and from every part of a room prevents excessive heat wastefully stacking up at the ceilingpulls cold air off the floor replacing it with heated air, completely eliminating uncomfortable cold floors. Open cherry radiants provide quick heat.

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#### CIRKLAIR DIVISION PRODUCTS

THE FOLSOM COMPANY

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acted as temporary secretary. Special credit is due Phil Crutcher for sparking the original organizing committee.

The LP-Gas division of the KP-MA was formally authorized by the group's board of directors at its regular quarterly meeting at Mammoth Cave Sept. 19. The 31 active and 3 associate membership applications of LP-Gas companies were favorably acted on.

The Kentucky LPGA will concern itself with safety methods, sound business management, specialized training, legislation, statistics, and instructive information. The organization is already publishing an official bulletin, entitled the KY LPG News.

#### Florida

More than 100 members of the Florida Liquefied Petroleum Gas Association, Inc., attended its fall conference Sept. 8 at the Orange Court hotel, Orlando, Fla.

The registration, which began at 9 a.m., was in charge of Gene Lanning, of St. Petersburg, the association's secretary. An unusually large number of applicants to join the association, was received.

President J. E. Price called the meeting to order. Carl Davis, state fire marshal, addressed the assembly on "Recent LP-Gas Legislation in Florida." Mr. Davis then answered questions put to him during an open forum. D. B. Duncan, vice president of the South Atlantic Vapo-Gas Co., Orlando, addressed the members on the "Cooperation of LP-Gas and Manufactured Gas Dealers."

At noon, the meeting adjourned for luncheon, served in the main dining hall of the hotel. On reassembling at

1:30 p.m., the members listened to an address on "Insurance" by Clarence E. Cooper of Davis, Dorland & Co. He was followed by an interesting and highly stimulating talk on "Electrical Competition" by L. L. Peters, of the American Stove Co., Atlanta, Georgia.

His address was followed by an open forum in which Mr. Peters answered all questions. The meeting adjourned at 4:30, after listening to reports and the announcement that the next meeting of the organization will be the spring conference, to be held in Daytona Beach on April 19-20, at which time new officers of the organization will be elected.

#### Kansas

Kansas dealers gathered at the Broadview hotel, Wichita, Oct. 20-21 to attend the annual meeting of the Kansas Liquefied Petroleum Gas Association. Appliances and equipment were exhibited. R. H. Mahnke, executive vice president of the association, was in charge of all convention arrangements.

Among the subjects presented to the members were those covering future production and demand of LP-Gas, what must be done to continue expansion, the industry's weaknesses, meeting electrical competition, and safety regulations.

Full convention story will appear in the December issue of BUTANE-PRO-PANE News.

# Illinois

L. H. Wright, Chemical Products Division, Phillips Petroleum Co., told Illinois dealers at their Aug. 27 meeting in Peoria, that fuel shortages and transportation difficulties were expected to continue during the coming winter.

Pamphlet No. 58 was the subject of

News

### **ASSOCIATIONS**

a talk by John Knox Smith, field engineer of the Liquefied Petroleum Gas Association, who urged strict compliance with its regulations by industrymen in order to avoid unfavorable legislation as the result of accidents occurring from noncompliance with the regulations.

The next meeting of the Illinois Liquefied Petroleum Gas Association will be held during December in Chicago.

#### Colorado

The annual convention of the Colorado Liquefied Petroleum Gas Association was held at the Albany Hotel, Denver, Oct. 13-14, according to W. E. McCabe, secretary. E. L. Scott, president, presided. There were equipment and appliance exhibits, as in former years.

Subjects presented at the meeting included discussions of fuel supply, sales ideas, carburetion, refrigeration, and an open forum for presentation of current topics.

Among the speakers were J. D. Arden, John Knox Smith, Harry Torbit, Roy Weinman, Seward Abbott, L. H. Wright, B. B. Turner, and John Powers. Full story next month.

# Florida—Georgia

A round table discussion conference arranged by the Gas Meters Association of Florida and Georgia, Sept. 6, in the Orange Court hotel, Orlando, Fla., drew an attendance of approximately 100 members. John Gilbreath, chief engineer of Servel, Inc., Evansville, Ind., was the featured speaker, his address dealing with the advantages of gas over electricity for air conditioning.

H. P. Thomas, Miami, Association president, presided, with B. G. Duncan, Orlando, vice president, assisting.

The Meters group conference preceded the convention of the Florida Liquefied Petroleum Association, Sept. 8, with Mr. Duncan as guest speaker.

### South Carolina

The South Carolina Liquefied Petroleum Gas Association held its annual meeting Sept. 6 at Myrtle Beach following a program of outstanding addresses, and other features. Fritz Turner, state insurance inspector, was a speaker, appearing in place of Insurance Commissioner L. George Benjamin, Jr.

John Knox Smith of Chicago, LPGA national safety engineer, was an afternoon speaker. A directors' meeting was held during the morning.

The convention drew an attendance of about 125, including dealers, salesmen and manufacturers' representatives.

#### Arkansas

Safety in the use of the "four servants of mankind"—fire, natural gas, gasoline and electricity—was demonstrated before more than 300 insurance representatives, butane gas dealers, safety inspectors and firemen at a meeting held Sept. 11 at the Arkansas School for the Deaf, Little Rock, Ark., under sponsorship of the Arkansas Butane Dealers Association.

H. F. Browne and E. J. Podgorski of Dallas, Tex., engineers of the United States Bureau of Mines, were in charge of the demonstrations, and their talks recommended that only those appliances specifically designed and approved for their particular tasks be used, and that appliances should be used only in the approved manner.

The flammability of gasoline, kerosene, naptha, butane and propane were demonstrated by unanticipated

# HERE ARE YOUR ANSWERS

PARTIAL LIST OF CONTENTS

WHAT IS PROPANE?—Supply, Properties, Definitions.

THE BEHAVIOR OF GASES—Pressure. Specific Gravity. Density. Compression.

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HEAT AND TEMPERATURE-Heat Transfer. Conduction. Convection. Radiation, Expan-

WHAT GOES ON IN A PROPANE CYLIN-DER? Construction, Filling.

THE SIMPLE REGULATOR—Design. Problems and Cures.

REGULATOR MANIFOLDS—Service Problems.

Multiple Installations, Various Manifold

REGULATIONS — Equipment Selection and Installation. Domestic. Industrial. Safety.

LP-GAS PIPE LINES-Friction, Sizes, Formulas. Charts.

TESTING FOR LEAKS AND ADJUSTING BURNERS—Flame Characteristics, Servicing.

FUNDAMENTALS OF THERMOSTATS-Types. Service. Expansion of matter under heat.

PILOTS AND PILOT CONTROLS — Types. Causes of Failure. Proper Location. Adjustment. Safety Pilots.

BURNER DESIGN AND APPLICATION — Ports. Orifices. Burner Installation.

APPLIANCE CONVERSIONS-Inputs for Domestic, Commercial and Industrial Burners. Required Information.

FACTS ABOUT WATER AND WATER HEAT-ERS—The Effects of Water on Heaters. Usage Tables.

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#### **ASSOCIATIONS**

explosions of tubes of these volatile substances. Volunteers, charged with static electricity, produced sharp explosions merely by touching containers of the various substances, and other types of explosions and their causes were shown or explained.

One of the most common dangers the use of high-octane liquids for cleaning—was stressed, and the audience was urged to promote use of only approved solvents for this household chore. "Gasoline should be used only in gasoline motors," both speakers urged.

The engineers explained that the cause of all fires is the correct proportions of fire's three ingredients—fuel or vapor, air, and heat, and said that safety demands separation of the three.

The proper method for controlling a fire, once it is started, was shown to be principally through use of fire extinguishers and other fire smothering agencies, and these were demonstrated also.

Butane dealers from 50 counties of the state and many fire department representatives from various cities and towns attended.

#### Tennessee

Butane-propane dealers of Tennessee met recently in Memphis and organized a state dealers association. G. T. Scott, Jr., Nashville Butane Gas Co., Nashville, was one of the organizers.

The association is still in the preliminary stage of development, with constitution and bylaws to be adopted and permanent officers to be elected.

# NGAA

The next annual meeting of the Natural Gasoline Association of America will be held at the Texas hotel, Fort Worth, March 24-26, 1948, according to William F. Lowe, secretary.

There will be two sectional meetings of the association prior to the annual meeting in March. One is scheduled for Amarillo in December and the other in Corpus Christi in January. J. H. Dunn will have charge of arrangements for the former and C. R. Williams for the latter.

At the Fort Worth meeting, as usual, entertainment will be provided by the Natural Gasoline Supply Men's Association. It will be the 20th year of such entertainment by that body.

## **Berkeley Short Course**

The first LP-Gas short course under the joint auspices of the University of California and the Western office of the LPGA was in session from Sept. 8-12 at Berkeley, and had a total enrollment of nearly 60.

Servicemen predominated, there being 23; and 14 owners or part owners of plants were the next largest group. There were nine representing company management and nine manufacturers' representatives and one representative from the State of Orgon, Bureau of Labor. Five incidentally were from Oregon. In addition there were 17 instructors.

# Utah

Utah dealers decided last summer that they needed a dealer association, so one was organized.

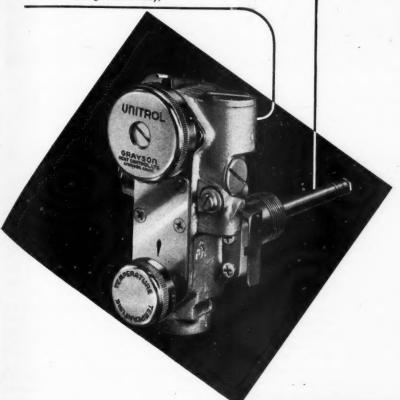
Fred La Frentz, Cedar City, was named president. Marshall Haines, Inland Gas Co., Salt Lake, was elected vice president, and Don Ogden, Serrice Liquid Co., selected for secretary treasurer. RED BRASS AND COPPER RESISTS WATER CORROSION

(for parts immersed in water)

THE IDEAL COMBINATION OF METALS

RESISTS CORROSION OF SULPHUR-CONTAINING GASES

(for gas valve body)



GRAYSON CONTROLS

DIVISION ROBERTSHAW THERMOSTAT CO. LYNWOOD, CALIFORNIA

NOVEMBER - 1947

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The group which met on Sept. 15 at Lakeside hotel, Eagles Mere, Pa., to organize the Pennsylvania Liquefied Petroleum Gas Association. Top row, left to right: H. K. Strickler, H. E. Thomas, E. B. Kennel, J. C. Goss, C. S. Staats, J. R. Myers, G. H. Myers, George Wells. Lower row, left to right: R. N. Goss, A. Lutz, L. F. Finkler, W. I. Ronald, A. E. Dauphine, Roy Johnson, R. Thayer.

# Pennsylvania Joins Ranks Of State Associations

Following a meeting at Eagles Mere, the Pennsylvania Liquefied Petroleum Gas Association is now a going organization, ready to tackle any and all constructive projects in behalf of the industry in its state.

The organization meeting was held Sept. 15 at the Lakeside hotel, Eagles Mere. The following Pennsylvania

marketers were present:

R. N. Goss and J. C. Goss, Goss Gas Products Co., Pittsburgh; C. S. Staats and E. B. Kennel, Staats Oil Co., Malvern, Pa.; Roy R. Johnson, Fuelane Corp., Liberty, N. Y.; W. I. Ronald, Pyrofax Gas Division, Carbide & Carbo on Chemicals Corp., Wyomissing, Pa.; L. F. Finkler, Rural Gas Co., Williamsport, Pa.; H. Emerson Thomas and George Wells, Westfield, N. J.; Raymond Thayer, Sloan & Zook Co., Kane, Pa.; H. K. Strickler and Alton Lutz, The Protane Corp., Erie, Pa.

In addition these visitors attended:
A. E. Dauphine, Suburban Gas
Corp., Hyannis, Mass.; J. R. Myers
and G. H. Myers, Myers Metered Gas
Service, Manhein, Pa.

The meeting was opened by Mr. Finkler as temporary chairman, and he appointed Mr. Lutz temporary secretary. Following a brief discussion, it was unanimously decided to organize and apply for a charter as a non-corporation under the laws of Penn-

sylvania.

Mr. Thomas, who previously had been assigned the duty of drafting a proposed constitution and by-laws, then supplied those present with these documents, which in general followed the models furnished by the Chicago office of the Liquefied Petroleum Gas. Association. Following discussion, classifications of members were amended slightly from those in the model by-laws. It was decided to provide three classifications, active, dealer associate, and associate. Active

dues were fixed at \$25 per year, dealer associates at \$5 and associate at \$25.

The temporary chairman appointed Raymond Thayer, George Wells and Roy Johnson as the nominating committee, representing three districts.

This committee submitted a slate of officers and directors who were elected unanimously to serve for an interim period or until the first official active membership meeting following the incorporation. The following were elected:

H. K. Strickler, president; H. E. Thomas, vice president, and L. F. Finkler, secretary-treasurer.

The following are directors:

District I: H. W. Rigterink, Sun Oil Co., Solgas Division, Philadelphia; District II: Roy R. Johnson, Fuelane Corp., Liberty, N. Y.; District III: H. K. Strickler, The Protane Corp., Erie, Pa.; Directors-at-Large: Theodore Kapnek, Natural Gas Co. of New Jersey, Lenhartsville, Pa.; Paul F. Zook, Sloan & Zook Co., Kane, Pa.

The following committee chairmen were made by President Strickler:

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George Wells, membership; W. I. Ronald, program; Walter Hoagland, safety; H. W. Rigterink, legislative; Harry Ward, finance.

The address of Mr. Finkler, secretary-treasurer of the new association, is in care of Pennsylvania Liquefied Petroleum Gas Association, Rural Gas Co., 145 West 3 St., Williamsport (3), Pa.

A constitution and by-laws were adopted unanimously, subject to legal editing. It was agreed that the next meeting should be held in a few months.

### Non-Code Tanks Must Go, Says Oklahoma Fire Marshal

State Fire Marshal M. G. Young has sent out a letter to all LP-Gas dealers in Oklahoma notifying them that, effective Oct. 15, all non-code tanks, commonly known as "homemade" tanks, will be tagged by the inspector of liquefied petroleum gas and not filled by anybody.

This action was decided upon at a recent meeting of the Liquefied Petroleum Gas Division of the State Fire Marshal's office.

There are many LP-Gas tanks on consumers' premises in Oklahoma which have been in use from 15 to 20 years and were installed before Oklahoma had any regulations as to the types of tanks that might be sold or installed.

The action is the outgrowth of a campaign on the part of the LP-Gas industry, sponsored by the Oklahoma Liquefied Petroleum Gas Association, and the recently created LP-Gas division, to secure lower insurance rates through the improvement of safety conditions.

State Fire Marshal Young also has sent the following notice to all LP-Gas dealers in the state or doing business within its borders:

"There has been much discussion of late with reference to this office insisting on dealers carrying a comprehensive coverage. The Fire Marshal has asked the State Attorney General for an opinion in regard to this matter. Their answer is that all dealers having any storage whatever must carry comprehensive coverage.

"If you are merely delivering without storage, a certificate providing for liability, property damage and public liability insurance with limits of not less than \$10,000—\$20,000 for bodily injury and limit of not less than \$10,000 for property damage, is adequate."

At a meeting scheduled to be held in the state fire marshal's office on October 20, a number of proposed changes in rules and regulations governing the LP-Gas industry will be proposed.



Left to right: Air receiver, compressor house, "thermeter" house and stock room, two

### New Propane-Air Plant Serves Gas to DeLand, Fla.

Announcement was made recently of the installation of a new high pressure propane gas-air plant in DeLand, Fla., by H. Hansell Hillyer, president of South Atlantic Gas Co. Mr. Hillyer stated the new plant was in keeping with the policy of the company to keep operations abreast with the latest development in the gas industry.

H. E. Ferris, vice president in charge of production, directed the installation of the new plant as well as the conversion of customer appliances. He stated that the erection of the propane-air plant was necessary because of the growth of the city of DeLand and the demand for gas there. Carbureted water gas was formerly served DeLand from the company's plant located in Sanford, Fla., through a 20 mile transmission line.

The new plant consists of two 25

Mcf per hr. gas-air machines built by the Pacific Gas Corp., and is capable of serving more than twice the present load now in DeLand. The new type gas provides 1000 Btu per cu. ft., as compared to the 525 Btu water gas. Pressure on the distribution system is being maintained at 13 lbs., due to seasonal drop in requirement, but can be doubled almost instantaneously if required.

### Butane Will Have Part in Building Ozark Dam

The Causey Butane Gas Co., of Harrison, Ark., has received award of a contract for installation of a butane gas system and equipment for the Ozark Dam Constructors, contractors for the huge Bull Shoals Dam on White river which is being built by the United States Engineers for flood control and power generation.

### Partners: Manufacturers & Dealers

By L. A. BRAND
Vice President, Empire Stove Co., Belleville, III.

WEBSTER defines partnership\* as "the association of persons joined together for mutual benefit." This is a very appropriate definition for the feeling the appliance manufacturers have for the liquefied petroleum gas men. However, we do not believe any partnership can exist unless each of the parties involved is willing and does contribute to the solidarity of the association.

In the past, the partnership has been rather loosely put together because you were compelled to use appliances not specifically designed for liquefied petroleum gas. These appliances gave no end of trouble. They had to be frequently serviced at tremendous expense to the dealers. No one was happy about it.

Now the smart appliance manufacturers are spending large sums of money for research to develop appliances designed specifically for liquefied petroleum gas. These better appliances, now available, have resulted in service calls on appliances being reduced from an average of four yearly per customer in 1936 to an average of less than one yearly per customer in 1946. This is a real contribution, resulting in added profits to the liquefied petro-

leum gas dealers. Everybody is happier now.

The need for sincere cooperation was never so urgent or imperative. A great potential market beckons. Never before has the American public been more gas conscious than now, but never before have your competitors been more determined to stop you. These powerful competitors are exerting every effort to legislate you from business through the persuasion of state regulatory bodies to enact regulations impossible for you to follow. If they succeed, it will be because members of the regulatory bodies are not fully conversant with your business and have a lack of understanding of your problems.

#### Electric Boys Are After You

Yes, these competitors are really out after your scalp. They are strong and powerful—they have only one common thought—"stop the gas man." The reason for this effort on their part is not hard to understand.

Recently the National Electrical Manufacturers Association admitted that the liquefied petroleum industry had cost the electric industry one billion dollars. The liquefied petroleum gas industry in the past 12 calendar months, installed 370,000 liquefied petroleum gas ranges. I do not have the fig-

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<sup>\*</sup> A paper delivered at NBPA convention in St. Louis, Sept. 15.



Lee A. Brand

ures on other liquefied petroleum gas appliances. I do know, however, that the percentage of my company's total production has jumped from 4% in 1939 to 48% in 1946 and is even higher in 1947. It is reasonable to assume that other manufacturers have experienced similar increases.

With such tremendous progress, the liquefied petroleum gas industry can no longer expect to be ignored by its competitors. It has got to become a full fledged, fighting industry and one that is definitely destined to make life rather miserable for its competitors.

Now what can we as an industry do, to offset these concerted attacks of our competitors.

1. We as an industry, must come out of our corner fighting as a team. The liquefied petroleum gas men and the manufacturers must exchange pertinent information. This can be accomplished in several ways. We believe the most logical is the appointment of joint committees to study the various phases of your business so that the proper recommendations can be made to assist the entire industry. Such committees, to be composed of manufacturers representatives, liquefied petroleum gas men and gas producers representatives, must view the over-all picture and their recommendations must be such as to help the entire industry rather than individuals or small groups of individuals.

- 2. We must set and maintain safety standards. Considerable work has been done along these lines by your associations. However, we believe added emphasis should be placed on this phase of your business. You, as individual dealers should cooperate more fully with this program.
- 3. As an industry, we must cooperate with voluntary regulatory associations or groups and we must cooperate fully with state regulatory groups. Instead of waiting for our competitors to write regulations governing our industry which, in most cases, would legislate us out of business, we must write these regulations ourselves and submit them to state regulatory bodies for their approval. You might say—why regulate the industry why not let things stand as they are? This is exactly what your competitors want!

Many states have already enacted regulations governing your industry. Some of these are in dire need of revision. In states where there are no regulations they should be written and submitted by you for adoption.

4. As an industry, we must oppose all efforts to restrict or strangle this business. We must be prepared to present a united front in case any group



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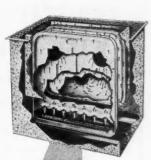
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CIRCULATOR HEATERS
DOMINATE THE FIELD
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GAS HEATERS

MONROE STOVE CO. + 3256 MILWAUKEE AVENUE + CHICAGO 18, ILLINOIS



THESE OUTSTANDING MONROE FEATURES WILL HELP YOU CLINCH MORE GAS HEATER

### Sales!

- Dual Heat Exchangers Twin heat exchangers squeeze all the heat from the air as it moves toward the flue.
- Patented Interior Circulates clean, fresh-heated air evenly throughout the home.
- Automatic Lighting Safe and convenient. Use only one match a season!
- Warm-Flor Radiants Scientifically designed to produce more infra-red heat and project it farther.

MONROE OFFERS YOU A COMPLETE LINE FOR EVERY HEATING NEED WITH ALL GASES attempts to strangle our business through regulations, mud slinging or in any other way. You may have a legislative committee or public relations committee at this time. If not, we strongly advocate the appointment of such a committee to which local and national activities of an abusive nature may be submitted so they in turn can prepare a defense against such activities.

So much for the industry as a whole. Now what can the appliance manufacturers do to help develop and expand your market.

- 1. The appliance manufacturers must strive for engineering perfection. They must constantly be on the alert and provide you with better liquefied petroleum gas appliances. They should and they must produce appliances designed specifically for use with liquefied petroleum gas.
- 2. The appliance manufacturers must supply you with reliable trade information so that you are familiar with new methods of application and selling.
- 3. The appliance manufacturers must help train your salesmen and servicemen. Such training programs must be well planned and must be constant and not periodical.
- 4. The appliance manufacturers must maintain the highest standard of manufacturing to provide your customers with the best possible service obtainable. They must manufacture appliances to reduce the cost of servicing so that the added profits made by you can be used to further promote your business.
- 5. The appliance manufacturers must provide you with safe, durable, efficient appliances to eliminate all possible hazards in your customers' homes.

6. The appliance manufacturers must realize that their business is dependent upon you, just as yours is dependent upon them.

Now as to the liquefied petroleum gas dealers.

- 1. They can help by first using all the information supplied to them by manufacturers and by their state and national association.
- 2. The dealers can school their salesmen to be servicemen and their servicemen to be salesmen. The most effective salesmen they have are good servicemen. The worst salesmen they have are poor servicemen, or so-called salesmen who know nothing about the dealers' service problems.
- 3. The dealers can teach their servicemen to be really servicemen instead of in name only. The worst advertisement possible is a bad installation. The dealers can insist on the servicemen following the instructions for installation furnished by the appliance manufacturers. They must make sure that every man charged with the responsibility of installing or servicing appliances or equipment is fully qualified before permitting him to do such work.
- 4. The dealers should analyze their community needs and problems and must immediately take the necessary steps to inaugurate the sales and advertising campaigns to assure them the maximum possible business from their area.
- 5. The dealers must immediately provide larger storage facilities either through their own storage or larger tank storage on the customers' premises. The quicker we eliminate any possibility of a gas shortage the more secure our industry will become.
- 6. The dealers and their employes must be prepared to tell prospects the complete, true story of liquefied pe-

News

troleum gas with a confidence and conviction that will remove all doubt. This is possible only by continued study to improve their own and their employes' knowledge of liquefied petroleum gas and liquefied petroleum gas appliances.

#### The Truth Will Get 'Em

- 7. The dealers can use factual ininformation judiciously and should pull no punches when using such information about competitors' products or about their competitors.
- 8. The dealers should never install any appliances but those designed for use with liquefied petroleum gas. Conversion in the field is not only an expensive, but also a hazardous operation. Most reliable manufacturers are now producing liquefied petroleum gas appliances. If any of your suppliers is not doing this, you should write him off. This job cannot be done with half-way measures. Converted appliances usually mean dissatisfied customers. You cannot afford to take this chance.
- 9. Fight competition fairly and aboveboard. Recognize the strength of your adversary. Learn something about his business. He has learned plenty about yours. Be prepared to scotch all false propaganda while stressing the virtues of your own business.

Remember, your most powerful competitor is the electric man. By the electric man, I mean the electric appliance manufacturer, the power company and the REA. They are all cooperating to defeat you.

Remember, you are the gas utility in your area. You are just as powerful as the power company. You have behind you, your national association and the gas appliance manufacturers, plus the knowledge that your commodity has wider acceptance because it is better, more economical and far more efficient.

Remember, too, that your neighboring liquefied petroleum gas dealer is not your enemy or competitor. He is your compatriot, interested in selling the same commodity as you. Don't fight him—instead, work with him toward the common goal of every family using gas for cooking, heating, water heating and refrigerating.

The opportunity is ripe. You can cash in on it or muff it. But you must act now. The liquefied petroleum gas dealers and the appliance manufacturers can form an invincible team if there is a mutual understanding that each one needs the other. Let's form our plans, know our signals and go out and hit the line together.

#### Warren Petroleum Opens Sales Office on Atlantic Seaboard

Warren Petroleum Corp. announces the opening of a liquefied petroleum gas sales office at 60 Park Place, Newark, N. J., with C. L. Hulswitt, formerly manager of their Detroit office, in charge.

Sales of LP-Gas by Warren in the Eastern section of the United States are made possible through tank ship movement of products from the Texas Gulf Coast to a new marine LP-Gas terminal now under construction at Newark.

The S. S. Natalie O. Warren, special tank ship, will transport over 1,300,000 gallons of propane per trip and will be loaded at Warren's terminal at Norsworthy, Texas (near Houston). It is expected that tank car and truck deliveries from the Newark terminal will be started early in December of this year.



UNIVERSAL PERFORMANCE PROVES L-P GAS HAS GOT IT

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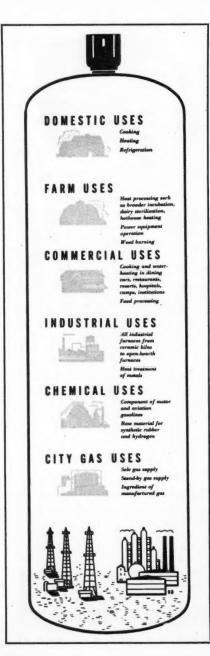
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# The Liquid That Is Gas

A N ever-increasing number of new dealers, salesmen, servicemen, and users in the LP-Gas industry justifies an occasional basic article which lists rudimentary facts concerning butane and propane.

Commonly, butane and propane are measured in gallons. Marketed production figures are usually expressed in gallons but when these are converted into cubic feet of gas the magnitude of the industry is more impressive. Also, it permits direct comparison with natural and manufactured gases.

In a recent issue of "The Lamp," a handsomely designed publication of the Standard Oil Co. (New Jersey), appeared an article entitled, "LPG—The Gas That Flows From Bottles," which not only discusses LP-Gas consumption in cubic feet but tells an interesting story about some of the important characteristics of butane and propane.

Dealers are certain to be interested in this presentation, a portion of which is extracted herewith by special permission of "The Lamp." Prior to the quotations below, the article reviews the growth of the liquefied petroleum gas in-

Liquefied petroleum gas has many uses. The chart on the left lists the principal services which it renders in fields as diverse as farm kitchens and city gas works.

## Expressed in Billions of Cubic Feet —

dustry. It states the 1946 marketed production was 1,425,000 gals., served to an estimated 3,500,000 domestic, commercial, and industrial users. With these figures in mind, the quoted portion of the article and the accompanying graphs are of special interest. This is an article that dealers can profitably show to their prospects who wish to learn how butane and propane are stored and used, when they are liquid in form and when gaseous.

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"A gallon of liquefied gas expands into from 30 to 36 cubic feet of gas, depending on whether the gas used is propane or butane or a propane-butane mixture. If we assume an average expansion of 33 cubic feet to the gallon, last year's total consumption of 1.425 billion gallons represented about 47 billion cubic feet of gas, equivalent in heating value to 235 billion cubic feet of average manufactured gas.

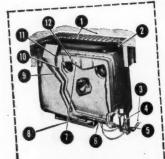
"This enormous consumption has been built up since 1922, when records of liquefied gas first began to be kept. Total consumption for that year was only 223,000 gallons, or 8 million cubic feet of gas. By 1946, this modest figure had been multiplied more than 6,000 times.

"But how is it that the same substance goes into the cylinders as a

Gallons in Thousands 1.500.000 TOTAL SALES 1,000 000 DOMESTIC 750.000 500,000 400 000 CHEMICAL MANUFACTURE 300 000 INDUSTRIAL AND MISC. 200 000 GAS 100.000 1931 1938 1941 1946

Use of liquefied petroleum gas has multiplied almost 50-fold in the last 15 years. Also shown in this chart (at left) is a breakdown of total sales into the principal fields of use.

### Especially for the L. P. Gas Industry



### CHECK THESE FEATURES

1. "In the floor" installation. Removable register. 2, Master valve handle at floor level . . . 3, Main fuel line . . . 4, Baso 100% Safety Pilot . . . 5, Automatic temperature control valve. (Thermostat is located on suitable wall.) .. 6," Whisper quiet" burners, have lava ports. Stay clean, Will not burn out ... 7, Rib-reinforced steel combustion chamber with "lifetime" finish of porcelain enamel ... 8, Handy cleanout door ... 9, Return air intake .. 10, Warm air output . . . 11, Air-cell-insulated jacket ... 12, Combustion area. Note how 9, 10, 11, 12 are spaced for maximum heat exchange and circulation.

## **Bu-Pro-Fire**

### Automatic Floor Furnaces and Space Heaters

- Here's a full line of fast-selling heating equipment especially for your field. Features a superior design floor furnace; includes space heaters for every need. Equipped especially for L.P. Gas. Named to identify with the L.P. market. This combination fits in with profitable L.P. merchandising:
- 1. Sell Appliances Which Expand Your Gas Business... Every Bu-Pro-Fire installation means another L.P. Gas outlet. Increases your gas profits. Bu-Pro-Fire is easy to sell because of many user-appeal features (see list at left).
- 2. Bank Double Profits... In addition to greater gas profits you get generous margins on Bu-Pro-Fire. This means additional bankable profit. You don't have to spend it on excessive installation or service costs.
- 3. Expand with Your Present Equipment...
  Delivery and installation of Bu-Pro-Fire is as simple as gas service itself. Furnace comes as factory assembled unit, about half the size of an ordinary refrigerator. You can set one up, ready to heat, in a few hours.

WE HELP YOU SELL: Write today for details of our selling plan, dealer help materials, mailing pieces, displays which help you sell.

The Bu-Pro-Fire line includes a variety of space heaters, radiant or circulating types, all porcelain enameled, featuring a forced air model with automatic control and 67,500 B.T.U. capacity. Priced right. Good margins. Good deliveries.



liquic and comes out as a gas? In the case of water, this transformation is a familiar one. Water is sometimes a liquid and sometimes a gas which is known as steam. The dividing line between these two phases of the same substance is its boiling point. Propane and butane also have their boiling points, though, unlike water, they boil at temperatures which are freezingly cold to the touch.

"At ordinary temperatures, both are gases. But if you chill propane gas down to just under 48° below zero F.,\* it will suddenly condense to a dew which can be drawn off as a liquid; and as long as you keep its temperature under 48° below, liquid propane will remain liquid in an open

howl.

#### **Expands With Rising Temperature**

"But the instant the temperature rises to 48° below, the liquid propane will begin to boil violently in its open bowl; and in thus changing over from its liquid to its gaseous phase, it will expand just as water expands when it changes over into steam. In actual figures, one cubic foot of liquid propane will expand to 273 cubic feet of gas.

"It is, of course, impracticable to keep propane chilled down to 48° below at millions of kitchen doors throughout the country. How, then, does it remain liquid in the cylinder?

"An interesting fact about boiling points comes in here. When we say that the boiling point of water is 212°, we mean its boiling point at sea level where it is under one atmosphere of pressure, i. e., 14.7 pounds to the square inch. Increase the pressure on it to 2 or 10 or 50 atmospheres, and its boiling point goes higher.

"It is the same with propane gas. Forty-eight degrees below zero is its boiling point under one atmosphere of pressure. But apply enough pressure to it, and you can bring its boiling point up to ordinary temperatures. In other words, it can be liquefied and kept liquid by pressure alone.

"A pressure of 450 pounds to the square inch, or about 30 atmospheres, is used to liquefy it at the natural gas field or in the refinery where it is separated from the natural gas or the crude oil in which it is found. The familiar steel cylinder at your kitchen door is tested to withstand a similar pressure, though intended for working pressures of not more than 220 pounds.

"The actual pressures vary with the weather. On warm summer days when the temperature rises to, say, 85°, the pressure in the cylinder rises to 140 pounds to the square inch. On a winter day, when the temperature falls to 35°, the pressure falls to 57 pounds. These are cylinder pressures. The pressure at the burner never varies, but is held to a uniform six ounces by the regulator.

#### Propane and Butane Compared

"Not until the temperature falls to 48° below does propane fail to exert its pressure in the cylinder. Propane, in other words, is an all-weather fuel. In this respect, it contrasts with butane, which boils at 32° above zero. Butane fails to exert its pressure as soon as the temperature falls to freezing; and with no pressure in your cylinder, you get not even 6 ounces of pressure at the burner. This explains why your cylinder contains propane and not butane.

"One ingredient is added to liquefied gas. Having only a faint smell of its own, it is given an odor to provide a warning to the absent-minded housewife who might leave an unlit burner turned on.

"One odorant which is widely used

News

<sup>\*</sup>Handbook Butane-Propane Gases names boiling point as —43.8 F. The commonly used figure is —44°.—Ed.

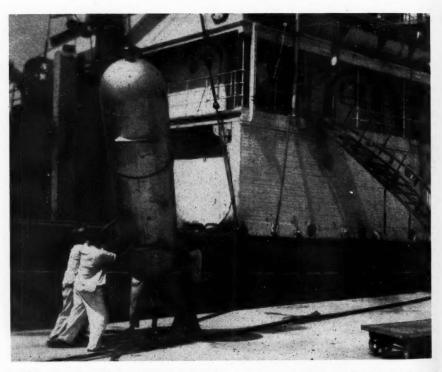
in the East is ethyl mercaptan, a light colorless liquid with a distinctive odor. Ethyl mercaptan is added to the liquid propane in the proportion of 1 pint to 10,000 gallons.

"As a result, the propane gas that reaches your kitchen stove has an odor a little like that of manufactured gas, though perhaps not quite as

acrid.

"Except for its trace of odorant, the 100 pounds of liquid that goes into your cylinder is all propane. One hundred pounds comes to a little more than 23 gallons, or, in its gaseous phase, 859 cubic feet. This is equal in heating value to nearly 4,300 cubic feet of average manufactured gas. Propane gas accordingly is used so sparingly that a single cylinder lasts an ordinary family three or four months.

"Because of its high heat content, it requires specially equipped stoves, which feed it to the burner through a pin-point orifice and mix it for burning with 23 times its volume of air, as compared to the 4 volumes that average manufactured gas requires."



This 350-gal. storage tank is being hoisted from a transport docked at Acalpulco, Mexico, after shipment by water from Pacific Tanks Co., Los Angeles. The Pacific tank is for dealer Claude Hojel, of Mexico City, who received it by motor truck from the Mexican port.



### AMERICA'S FINEST

### on the basis of performance

In trouble-free, reliable, fully automatic operation, DAY & NIGHT Water Heaters are front rank performers. And when it comes to engineering and exclusive economy features, DAY & NIGHTS are truly "America's Finest" water heaters.



Day & Night Butane appliances are exported by Anchor Oil Co., Houston, Texas

DAY & NIGHT MANUFACTURING COMPANY
Monrovia, California • One of the Dresser Industries

ews



#### AUTOMATIC CLOCK CONTROL OF OVEN

TAPPAN Visiquide cooking chart

TAPPAN one-piece chrome lined oven

Automatic top burner lighting • Automatic oven lighting
3½ hour Telechron timer

Let us tell you about Tappan's complete program of LP merchandising helps and the LP Sales Maker.

### THE TAPPATT STOVE COMPANY . MANSFIELD, O.

For 66 years, makers of fine ranges

### Pennsylvania Distributors Open de Luxe Showroom

THE Protane Gas Service Co. has opened its new building at 26th St. and Powell Ave. in Erie, Pa., one of the finest of its kind in this section of the country. The new building was erected to provide more efficient service facilities and a better display of appliances.

The Protane company has taken full advantage of the strategic location to make its new building a show place. Placed well back from the highway, its white glass exterior is floodlighted at night and the landscaping is eye-arresting. Cobalt blue letters on the pylon at the left side of the building advertise the firm to passing traffic.

The building is constructed of blocks. There is no basement, the con-

#### By GEORGE E. TOLES

crete sub-floor being poured on broken stone fill. The showroom proper is 45 feet long and 20 feet deep. The thought behind its planning was to permit the entire room to serve as a show window.

In locating appliances, this thought is always kept in mind so that there is very little interference or obstruction of view by over-filling the showroom. This is important because the structure is located on a heavy traffic artery.

The office is located in the rear of the showroom at the left side of the building. It measures 15 by 20 feet and has steel casement windows and



New showroom and office of Propane Gas Service Co., Erie, Pa.

lows

the same interior showroom finish.

The balance of the rear section of the building is occupied by a small work shop and an office where the service crews check in and out in the morning. Exterior of the building is white carrara with aluminum trim.

One of the outstanding features of the new building is its heating system. Radiant heating has been installed in the floors for interior heating, and under the concrete decks and sidewalks outdoors for snow removal.

These systems are operated on separate boilers, providing completely independent operations. The snow removal system is so arranged that one of the girls in the office can merely press a button at any time during the winter and start the system operating.

The snow removal equipment is figured to melt at least two inches of snow per hour. The company is considering air conditioning the building and is scheduled to make an installation before next summer.

The building is insulated with 4inch bats over the ceiling and then
with 1 inch of celotex on top of the
metal roof decking. On top of the celotex is a bonded built-up roof upon
which is carried one-half to one inch
of water which helps cool the structure in hot weather.

O. Rex Place is in charge of retail sales for the Protane Gas Service Co. and Charles Schauble is service manage at the new location.

#### Labor Minister Announces LP-Gas Laws from Saskatchewan

Regulations respecting handling and distribution of liquefied petroleum gas were announced recently by Labor Minister C. C. Williams in a bureau of publications release, from Regina, Saskatchewan, Canada. The regulations are directed at providing safety in connection with distributing plants and all pressure vessels, storage tanks and portable cylinders used in the liquefied petroleum handling business.

All propane gas distributors must register with the labor department and have a permit for carrying on distribution operations under the new regulations. Distributing plants must meet certain minimum standards, and these plants, together with every storage or transport tank used in handling the gas, are subject to inspection by an inspector working under authority of the steam boilers branch.

Every gas storage tank and pressure vessel used by a distributor must be approved by and registered with the labor department. The design and construction of every storage tank and pressure container must conform to the American Society of Mechanical Engineers code, with the exception of portable cylinders, which must be built according to Interstate Commerce Commission or board of transport commissioners' specifications in order to be accepted transportation by all railways in Canada and the United States.

Rules and standards of the National Board of Fire Underwriters were also adopted as supplementary to the regulations insofar as they apply to equipment covered in the regulations.

A minimum registration fee for distributors is set at \$15, with an annual fee depending upon the number of consumer installations serviced. Penalty for violation of any of the regulations or codes and standards set forth therein is a minimum of \$25 and a maximum of \$100 for each such violation.



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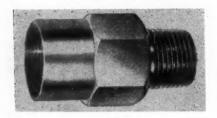
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### **NEW PRODUCTS**



#### Relief Valve

The Bastian-Blessing Co., 4201 Peterson Ave., Chicago 30.

Model: No. 3129.

Application: To be used for small ASME containers, for either aboveground or underground installations, and on ICC cylinders.

Description: In accordance with the new provision in NBFU Pamphlet No. 58, 1947 edition, the safety relief valves are rated by their discharge capacity rather than by free discharge area. All ratings are determined not by the manufacturer but by actual tests conducted by Underwriters' Laboratories, Inc., or other recognized testing laboratories.

Seven series of new relief valves and multivalves—a total of 88 valves—conforming to the new requirement, are available. Valve No. 3129 is recommended for protecting the by-pass on pumps, for use on charging manifolds, and for installation in liquid lines at bulk stations to relieve excessive hydrostatic pressures.

The inlet connection is ½ in. male taper pipe thread. The same valve, No. 3128, is available with ¾ in. male taper pipe thread. If the application

requires that the discharge be piped away, the No. 3129-10 adapter should be added so that the discharge pipe can be connected to the relief valve.

The safety valves conform to the sections of Pamphlet No. 58 which require that the valve be marked to show: the "container type" for which it is designed; the pressure vessel code designation for which it is designed; the start-to-discharge presure setting; the rate of discharge at full open position; and the manufacturer's name and catalog number.

### Gas Range

Grand Home Appliance Co., 2323 E. 67th St., Cleveland.

Model: No. 647.

Application: Domestic range usable with LP-Gas and city gas.

Description: This new range comes



equipped with direct-fired, high speed type bake oven. Extra-thick, highdensity fiberglas insulation provided in both oven and broiler assures maximum fuel economy and minimum surface temperature.

The cooking top has two giant speed burners in front for fast frying, boiling, and large utensil use, and two simmer burners in rear for economy and waterless cooking. Work space is provided in the center. Top burners light automatically, are porcelain enamel with removal aluminum heads, and are guaranteed for the life of the range. A utensil compartment with drop door and a utensil drawer allow storage space for pots and pans. The broiler with a drop front door for shelf has a smokeless broiler pan.

Dimensions: 42 in. high; 40 in. wide; 26¾ in deep; 36 in. cooking top height; 18 in. x 13 in. x 19 in. oven; 14% in. x 16% in. broiler pan surface. The range is finished in porcelain enamel throughout.

### Swing Check Valve

Pokorney Manufacturing Co., 3117 Clybourn Ave., Chicago.

Model: "3000" Series.

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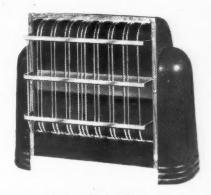
Application: Especially adapted for use with LP-Gas, natural and manu-



NOVEMBER - 1947

factured, these check valves offer a sensitivity to low flow, full flow through the valve with minimum resistance, non-leaking through the check, and a free action check mechanism which will not stick on minimum flow.

Description: Produced in bronze aluminum and grey iron and in both screwed and flanged types, the check valves range in I.P.S. sizes from ½ in, to 6 in. Larger sizes will be available later.



### Infra-Ray Heater

Bien Air Conditioning Co., Monterey Park, Calif.

Model: No. 401.

Application: Domestic heater for use with LP-Gas, natural or manufactured.

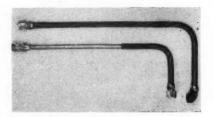
Description: Heats by projecting a beam of infra-red rays to the "living level" of the room, giving instantaneous heat and concentrating a sufficient part of the heat rays at the floor level to eliminate cold floors.

The heater has a horizontal radiating tube located at the focal point of a concave reflector. Internal baffles force the heat against the total sur-

face of both the radiating tube and the reflector, generating a compound beam of radiated and reflected infra-

red rays.

Available in either vented or unvented models, the heater measures 25 in. high, 26 in. wide, and 12½ in. deep. It has a capacity of 40,000 Btu. It is equipped with a heavy cast slotted port burner; inspection door for ease of adjustment and servicing. Complete burner assembly is removable by loosening for screws. The heater is finished in a two-tone effect, while the radiator tube and reflector are of high temperature ceramic surface.



### Gas Range Connector

Chicago Metal Hose Corp., Maywood, Ill.

Model: "Rex-Weld" RW-68 and RW-67-T.

Application: Connection for ranges, heaters, refrigerators and other gasburning household units.

Description: Use of this new, flexible, bronze, gas range connection facilitates cleaning, painting and repair work, inasmuch as the range may be moved close to the wall after connecting. With this type of connection there is no wasted kitchen space.

Both models are approved by the American Gas Association. The newest model, RW-67-T, ranges in sizes from 2 to 5 feet while model RW-68

comes in standard lengths of from 11/2 to 5 feet.

A 2-color, 2-page folder has been released showing these products in large size, together with illustrations of fittings and specifications. Copies may be obtained by writing to the company.

#### Coffee Urn

S. Blickman, Inc., 2109 Gregory Ave., Weehawken, N.J.

Model: Tri-Saver Coffee System.

Application: To brew coffee without the use of urn bags or filter paper, which have been replaced by a permanent, stainless steel filter.

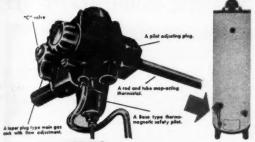
Description: Single urns, combination urns, and 3-piece batteries are included in this line of coffee makers. The new filtering method eliminates the possibility of spoiled coffee due to torn filter papers, according to the manufacturer, and holds grounds safely above the coffee level in liner.

Urns and batteries can be supplied in capacities from 20 to 60 gals, for each urn. A 3-piece institution battery can serve up to 2000 persons at one time.

Tri-Saver urns are built entirely of stainless steel and have "Sealweld" construction. An electric repouring pump is furnished as standard equip-



The RHEEM 100% DUAL CONTROL



This compact, patented control is standard equipment on Rheem automatic water heaters with the exception of the series 20 economy model. It guarantees safety because it automatically shuts off all gas if the pilot light is extinguished...it also makes it impossible for gas to flow to the burner while the pilot is being lighted.

The Rheem 100% Dual Control consists of four separate units contained in one casting:

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Set lever accurately at "pilot". Depress pilot reset button down to the cap nut.



Keeping button depressed, light pilot. Continuing holding button for 2 minutes. Release the pilot button.



Now turn the lever to "on". Turn dial to desired temperature.

### TO SERVICE

F THE PILOT LIGHT GOES OUT, CHECK:



SIZE OF FLAME. If the pilot light does not envelop the thermocouple, it must be adjusted. Remove the screw cap and turn the small screw underneath.



POSITION OF LEVER. Was "pilot" set in dead center of indicator button? If not, pilot reset button could not have been fully depressed.



CONNECTION OF THEEMOCOUPLE LEAD TO MAGNETIC VALVE. Is this double-thread connection tight? If not, tighten it firmly.

Complete data for operation and service of the Rheem 100% DUAL CONTROL is contained in an attractive, clearly illustrated manual. If your service men are acquainted with this information, it may save them time and labor in the field. Just indicate the number of copies you need and mail this coupon.

Rheem

**Automatic Gas-Fired Appliances** 



Sheem, Dept. R.-E. 13

S70 Lexington Avenue, New Yesh 22, N. Y.

fingse said toe [ ] copies of year instruction Memori on
the Sheem 100% DUAL CONTROL, of no cost.

NAME.

YYYA.

COMPANY.

APERTSE.

### Not An "Adaptation" - A REAL LP-GAS FURNACE **Engineered For LP-GAS Throughout, By** AMERICA'S LARGEST MAKER of HOME-HEAT UNITS



Has all famous Coleman "Warm-Floor features millions are reading about—gives you more "pre-sold" customers,

Works with Butane. Propane or Mixed LP-Gases-widens your opportunities for selling,

Made by Colemani-America's largest maker of home-heating unitstrusted by millions.

**Automatic Safety** Pilot-with 100% positive shut-off-a safety feature that sells.

> HERE'S THE ONLY NATION-ALLY-KNOWN FLOOR FURNACE WITH SPECIAL LP-GAS ADVANTAGES -- SO --

LET'S MAIL THIS COUPON FOR DETAILS OF THE COLEMAN FRANCHISE!



Send now for these facts - about this advanced Coleman LP-Gas Floor Furnace that you can sell easier, with faster turn-over. Compare the Coleman features that have won thousands, against any other floor furnace. Compare Coleman's special engineering, that makes this a TRUE LP-Gas unit! Compare the way Coleman backs you with merchandise and advertising. And get the terms of the Coleman franchise which have already won so many top dealers. Coleman welcomes every comparison, for comparison will win you, too. Mail the coupon now!

The Coleman Company, Inc., Wichita 1, Kans.; Philadelphia 8 (Terminal Commerce Bldg.); Los Angeles 54.

Floor Furnace Oleman LP-gas

The Coleman Co., Inc., Dept. BP-657, Wichita, Kansas.

Yes, please have your Coleman distributer near me give me full facts, about the dealer franchise for Coleman LP-Gas Floor Furnace

in my	locality.
Name	
Store	Name
A 44-	

ment which eliminates need of pouring water through the grounds by hand and also circulates the boiling water and repours the coffee. A coverlifting device is another feature of the institution urns.

#### Spherical Tanks

Dallas Tank Co., Inc., 201-5 West Commerce St., Dallas.

Description: For storage and transport of liquefied petroleum gases, available for either butane, butane-propane mixtures, or propane. Available in capacities of 150, 250, 430, 1000, and 4534 gals. of the following dimensions:

Model	Diam.	Water Gal.	Wt.	
P-1	41"	150	450 1	lbs.
-0-2	48"	250	760	66
0-3	571/2"	430	1124	44
0-4	761/2"	1000	2535	66
0-5	126"	4534	11,000	44

The spheres are of ASME code construction, complete with standard approved fittings.





#### House Line Valve

Kerotest Manufacturing Co., 2525 Liberty Ave., Pittsburgh, Pa.

Description: A new, patented, diaphragm, packless construction permits inspection and replacement of the multiple metal diaphragms with valve under pressure and without interrupting service through the valve.

This LP-Gas valve is available in plain, equipped with a ball or excess flow check, or tapped for dip tube. The valve is listed with Underwriters' Laboratories, Inc.

Bulletin No. 47-LP, describing this and other Kerotest LP-Gas valves, is available upon request.

### Capacity Gauge

Small Parts Machine Co., Hawthorne, Calif., manufacturers. Distributed by Manchester Welding and Fabricating Co., 738 E. Manchester, Los Angeles 1.

Application: Dual purpose gauge



for checking amount of fuel in tank and indicating 10% level.

Description: The new Universal dual purpose gauge shows in an instant how much fuel is in the tank. Sliding tube extends into tank through 10% valve. This tube can be raised or lowered to determine existing level of fuel. When end of tube reaches fuel level, fine spray is released from hole near top end of tube. (See illustration.)

This operation is very simple and anyone can test the liquid level when they desire to do so. In this way tank owners may determine how much fuel they have and thus report to the dealer if they are running low. This type of gauge is especially advantageous to drivers as they can tell in an instant how much fuel is in the customer's tank.

In addition to the sliding tube for testing level of liquid, this piece of equipment contains the standard 10% valve. When tank is being filled, attendant releases regular screw nut and fills tank to 10% level. The capacity gauge in no way hinders or complicates operation of 10% valve.

### Gravity Furnace

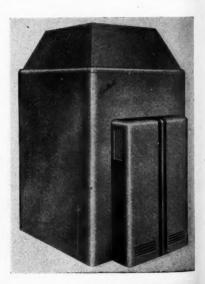
Surface Combustion Corp., Toledo,

Model: Janitrol-Series GCS-64.

Application: Domestic furnace for use with LP-Gas.

Description: This model is available in two sizes, one with an AGA rated input of 75,000 Btu and the other with 100,000 Btu. Finished in a baked, gray, 20 gauge steel, the exterior attractiveness is enhanced by the casing's rounded corners. An ingenious method of locking the casing panels together is used without the necessity of bolts or screws.

Controls include V-835 low voltage magnetic valve and transformer, T81 thermostat, quick acting automatic pilot, adjustable gas pressure regulator, pilot cock, and tubing with fittings and thermostat and transformer wire. An all-welded steel combustion chamber and radiator assembly is provided. By a process of maintaining a uniform metal welding temperature, all larger joints are seam welded. A flame retention type burner with alloy diffuser is used. It has a wide adjustment range and the accurately proportioned venturi insures proper mixture of gas and air. A burner air duct directs secondary air to the burners.



BUTANE-PROPANE News



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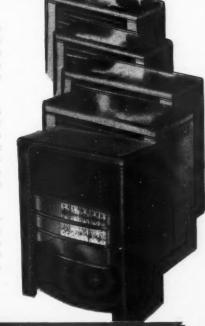
air

News

There's a new heat wave sveeping the country...a heat wave that has brought to Dearborn the most indisputable approval that buying America can give: first place in dollar volume on sales of has heaters!

Behind this coast-to-coast acclaim lies two major factors—the realization by dealers and customers alike that Dearborn actually is the world's finest, safest gas heater, and a national consumer advertising campaign which has made the name of Dearborn synonymous with luxurious yet economical, efficient heat.

Dearborn has risen to the top by making the best product and telling the world about it—two basic policies that will continue to mean money in the bank for Dearborn dealers throughout the nation during the years to come!



### LEGICATION STOVE CO.

### State Of Page 1 | State Of Page 1 | State Of Page 2 | State Of Page 2 | State Of Page 2 | State Of Page 3 | State Of

AKERS OF THE WORLD'S FINEST

### **POWER**

### Adapting Natural Gas Engines to Butane

WITH the ever - increasing transportation and storage facilities for handling LP-Gas, the fuel is now reaching many areas where heretofore it has been relatively unknown except as bottled gas for domestic use. Nowadays, with one large storage tank on the farm or rural property the owner may operate his household appliances, do many chores about the farm as well as pump for water and generate electricity for sundry uses. Also, he may power his trucks and tractors.

Many LP-Gas dealers are asking for more information on the adaptability of the fuel to internal combustion engines. These dealers, often specialists in the use of LP-Gas for domestic and household use, have little knowledge or equipment necessary to convert engines to properly burn butane-propane. It is to this large percentage of dealers that this article is directed.

There are two general types of butane-propane conversions: The automotive type where engines of fairly low compression are "converted" to burn LP-Gas, and the stationary type of engine ordinarily designed for use on natural gas. The subject of converting gasoline By L. G. SMITH
Field Engineer, Ensign Carburetor Co.

engines for LP-Gas has carried with it tremendous complications which have frightened many a dealer out of selling fuel for internal combustion engines because he was afraid to tackle the job of converting the engine or of servicing the equipment after the installation was made.

It is quite true that gasoline engines in trucks, tractors and automobiles still offer the usual problems of changing engine compression, manifolding, ignition, cooling and carburetion. To thoroughly do a job of this kind requires a good engine man and if the dealer does not have such a man on his staff he should be very careful about selling an installation to replace a gasoline outfit. However, with the second type of conversion, the stattionary engine, the story is quite different and not at all difficult. Stationary applications for water pumping, electric power generation, etc., are very popular in some parts of the country and serve as

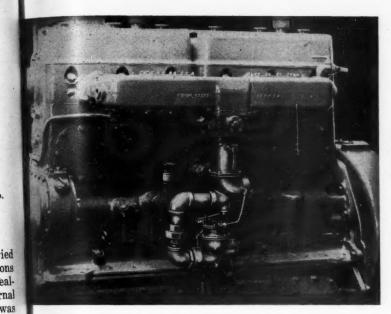


Fig. 1. Waukesha stationary gas engine which is easily adaptable to butane - propane fuel.

Fig. 2. Allis-Chalmers stationary engine power unit equipped to burn natural gas.

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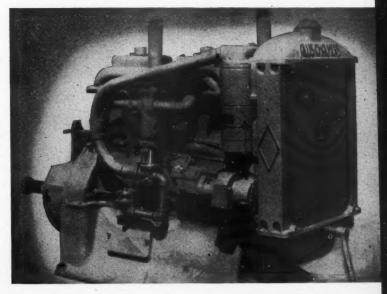
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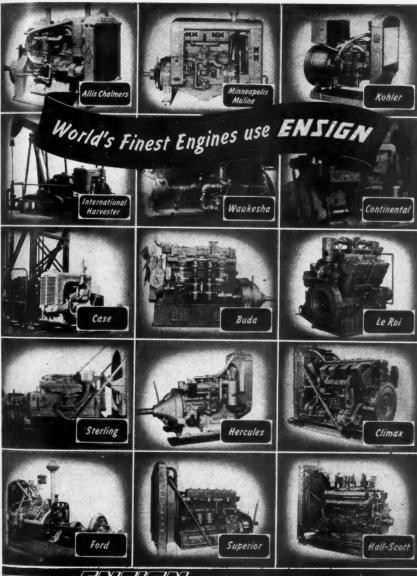
Climax stationary engine on Arizona irrigation well. The fuel is butane.

valuable fuel load builders for the dealer during the quiet seasons.

The application of LP-Gas to stationary engines is a much simpler matter and need not cause the dealer as much concern as automotive engines. The reason for this is very simple. Practically every manufacturer of stationary gas engines in the country today builds an engine for use with natural gas. The characteristics of an engine for use with natural gas are practically the same as an engine for use on LP-Gas.

A fuel dealer can with a high degree of assurance sell his customer on the use of LP-Gas for stationary engine use if he will point out to the customer that he may obtain an engine from any of the large manufacturers which has been designed for natural gas fuel.

It is a very simple matter to take this engine, equipped for burning natural gas, and to apply a butane vaporizer and pressure reducing regulator to the natural gas carburetion equipment already existing on the engine. The dealer or his customer should specify when ordering his engine for stationary use that the engine be equipped for natural gas. (Also ask for engine for LP-Gas as some engine builders have them.) An engine equipped for natural gas comes complete with higher compression ratios, heavy duty ignition system, cold inlet manifolds and usually with water thermostats in the cooling system and a carburetor with a



ENSIGN CARBURETOR COMPANY

7010 SOUTH ALAMEDA STREET + P.O. BOX 229 + HUNTINGTON PARK, CALIFORNIA
BRANCH FACTORY: 2330 WIST SEIN STREET, CHICAGO 36, ILLINOIS

NOVEMBER - 1947

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metering regulator for use with natural gas. These features are all necessary for an engine to burn butane or propane.

Figures 1 and 2 show two well known makes of internal combustion engines equipped for use with natural gas fuel. To equip these engines for LP-Gas a butane filter, vaporizer and intermediate regulator, as shown in Figure 3, are applied. Liquid butane must be taken from the storage tank and piped to the liquid butane filter. as shown in Figure 3. The vaporizer converts the liquid into a vapor. The vapor then enters the metering regulator, 1 of Figure 3: thence to the carburetor where it is mixed with air in the correct ratio for combustion before it reaches the engine cylinders.

It is necessary to use liquid butane rather than butane vapor off the top of the storage tank, mainly because the liquid butane in the tank would not vaporize rapidly enough to produce vaporized fuel sufficient quantities for the heavy horsepower output of the engine. This will be quite evident when one stops to consider that vaporized butane-propane has expanded 270 times its liquid volume. The butane vaporizer, Figure 3, is a device for converting the liquid into a vapor in quantities large enough to meet the requirements of the engine. The vaporizer is heated by the engine water. The

### **TATTERSFIELD**



Sketch showing the equal flow of fuel to each cylinder insuring more power and less fuel consumption at all speeds.

### BUTANE ENGINEERED PROPANE MANIFOLDS



TATTERSFIELD Butane-Propane Manifold and Mileage Meter Installations
SAVE TRUCK OPERAIORS from 12% to 15% in operating costs.

TATTERSFIELD Manifold and Mileage Meter installations are profitable installations and most important of all, you make a steady Butane user. Power conversions on trucks, tractors and stationary engines will be a great factor in increasing your volume.

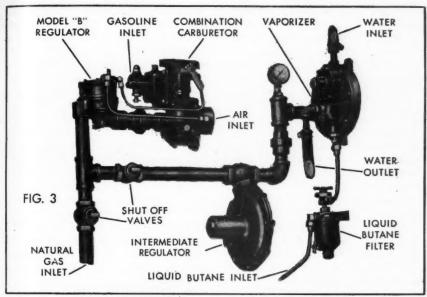
WRITE FOR OUR DEALER PRICES on Ford, International, G.M.C., Dodge, E. H. Mack, and Chevro-

let truck installations. Also available for passenger cars.

### Electric and Carburetor Engineering Co.

2323 E. 8th St

"Pioneers of the Butane Industry" Los Angeles 21, Calif.



STATIONARY MULTI-FUEL INSTALLATION BUTANE-NATURAL GAS-GASOLINE

engine water temperature, controlled by a thermostat, is fairly constant and makes possible a predetermined maximum output from the vaporizer.

On the other hand, the quantity of vapor available from the fuel storage tank depends greatly upon atmospheric temperatures and the size of the tank. In cold climates the liquid butane-propane within the tank would not vaporize as rapidly as the same fuel under summer conditions. To eliminate the problem of producing sufficient butane vapor for engine use the vaporizer has been developed to provide a continuous supply of fuel under all atmospheric conditions.

Intermediate regulator, Figure 3, simply reduces the pressure of the vaporized butane passing between the vaporizer and the metering regulator indicated as Model B, Figure 3. Manufacturers of butane-propane regulators and vaporizer equipment supply complete instructions for the installation and adjustment of these various devices.

When a dealer need not concern himself about engine compression, ignition, manifolding, cooling system and carburetion equipment, many of his problems of applying butane-propane to the engine are eliminated. All he need to do is obtain the liquid butane filter, vapo-

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rizer and intermediate regulator and attach these parts to the natural gas engine according to instructions which accompany the devices. Of course, he needs a high

pressure fuel tank.

This article should not be taken to mean that engines equipped to burn gasoline need not be modified or converted for use with butane. The same problems still exist concerning the raising of compression pressures, manifolding, ignition, cooling system and carburetion, as have been dealt with in earlier articles.

Generally speaking, gasoline engines must be modified in some form or other to get the best results from butane-propane. There are certain exceptions, as in the case of high speed engines built by

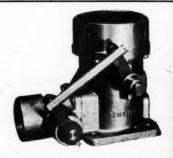
Waukesha Motor Co., Continental Motors Corp., and Hall-Scott Motor Car Co., which are designed for LP-Gas. Minneapolis-Moline builds a tractor completely equipped for butane-propane as well as an engine for stationary power use.

It is recommended that the LP-Gas dealer consult the engine manufacturer's local representative before applying butane-propane to any engine. Very often these talks with the engine manufacturer bring to light important details and suggestions which make life for the LP-Gas dealer much easier. Frequently, in the case of tractor and truck applications, the manufacturers can supply the dealer with the necessary parts to easily and efficiently apply this fuel.

In summary, it is felt that LP-



3C CARBURETOR for Liquefied Petroleum Gas



This is a metering valve carburetor to proportion fuel to the gir. The metering feature is through its positive hookup of throttle so that every movement of

the throttle moves the metering valve to maintain correct proportions of fuel. Practically all other carburetors are of the venturi type.

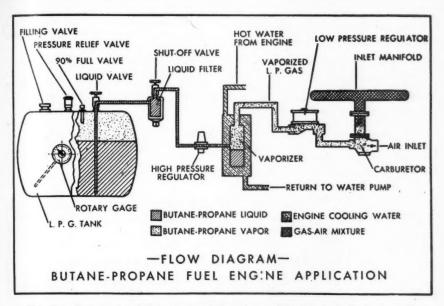
The CENTURY 3C Carburetor is made to start on a closed throttle. It simplifies adjustment. To Truck owners who want easier starting, fuel economy and power, the 3C Carburetor is the answer.

### CENTURY GAS EQUIPMENT COMPANY

11188 Long Beach Blvd.

Lynwood, Calif.

OLDEST MANUFACTURERS OF LP-GAS CARBURETION



This flow diagram of a butane-propane fuel engine enables the mechanic to trace the movement of liquid and gas from tank to carburetor.

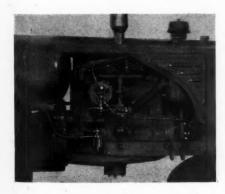


Fig. 5. Typical installation of butaneequipped Minneapolis-Moline tractor. Illustration indicates liquid line from butane tank, liquid filter, vaporizer and low pressure regulating unit and straight gas carburetor. Also shown are cold inlet manifold, water line to vaporizer from cylinder head, and air inlet tube from air cleaner.

Gas dealers generally should know about the availability of natural gas engines for industrial work. These natural gas engines were developed for use in oil fields throughout the world and practically every engine company in the United States builds stationary engines for use with natural gas.

LP-Gas dealers should know that these engines can easily be equipped to burn butane or propane without concerning themselves about the intricacies of proper engine modification before LP-Gas can be burned. The Ensign Carburetor Company, Huntington Park, Calif., has a natural gas and butane Manual No. 107 which is available upon request.

#### New Carburetor by Century Now on Automotive Market

A new carburetor for gaseous fuels (liquefied petroleum or natural gas), known as Century 3C (controlled combustion carburetion), is being placed on the market by Century Gas Equipment Co., Lynwood, Calif.

Practically all other carburetors are of the venturi type. This is a metering valve carburetor in that it proportions air to the fuel. The metering feature is through its positive hookup of the throttle so that every



movement of the throttle moves the metering valve to maintain the correct proportions of fuel.

This carburetor is made to start on a closed throttle, and is ideal for engines where the throttle can be closed for starting.

It is based upon 20 years of carburetion experience with a great many truck, tractor and stationary engines of all makes and sizes. This revolutionary carburetor has been tested by several truck owners. Some are changing over their fleets as carburetors become available, because of easier starting, fuel economy and good power.

This carburetor simplifies adjustment as it is not sensitive to altitude, temperature or atmospheric conditions. Trucks along the Pacific Coast work under most severe conditions when going from sea level to as much as 9000 feet elevation.

At present, this carburetor is manufactured for automotive or truck engines, and industrial engines where the governor is not attached to the carburetor throttle.

The carburetor is now available in sizes of 1½" and 1¾". Larger sizes can be obtained within 60 days.

### Parts Catalog

Midland Parts and Bearings Co., of Irving, Kan., and Kansas City, Mo., is in the process of distributing its new catalog, No. 479. This catalog covers a complete line of copper and alumi-



num tubings, Imperial Brass fittings, and shut-off cocks, and tools for tubing, as well as many accessory items particularly adaptable in the LP-Gas trade.

Copies of this new catalog may be obtained by written request addressed to LP-Gas Division of the company, 1418 Grand Avenue, Kansas City 6, Missouri.

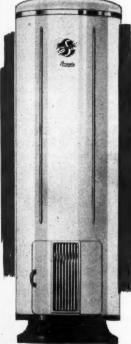
#### New Propane Dealer Opens Office in Atlanta Suburbs

The Atlanta, Ga., metropolitan area's newest business venture, the Community Gas Co., held its formal opening early in September at Tucker.

Head of the new venture is W. C. Lea, president, who formerly was in the construction business in New Orleans.

The company will specialize in propane gas, for both residential and commercial users, and the sale of gas appliances.





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News

Germaglas

SMITHWay
WATER HEATERS\*

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No wonder Permaglas Water Heaters are so popular! Home owners everywhere have discovered that it is actually cheaper to install this automatic water heater—and avoid costly, frequent replacements later.

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# Earnest LP-Gas Men Fight Heat to Learn Basic Information

NE hundred ten LP-Gas men from 14 states registered for and attended the 3-day LP-Gas Short Course at the University of Tulsa, Sept. 3-5. Considering the fact that the temperature averaged 110 deg. during these three days—the hottest 3-4-5 of September on record in that city—the attendance was good both from the standpoint of the number and the interest manifested in the general sessions and the afternoon classes.

The only diversion from the serious purpose of the session was the banquet (no speeches) given the group the evening of Sept. 4 in the Topaz Room of the Hotel Tulsa.

#### Selecting Consumer Equipment

By RALPH ENGSTROM\*
The Bastian-Blessing Co., Chicago

#### Factors to be Considerd:

- The equipment selected must be safe. It must conform to national, state, and local regulations.
- 2. It must perform satisfactorily under all conditions.
- 3. It must be easily repaired or replaced.

#### **Pressure Regulators**

The primary function is to maintain a reasonably constant outlet pressure regardless of fluctuation in the inlet pressure.

Many papers of unusual import to the LP-Gas industry were presented at the 1947 University of Tulsa Short Course.

Sufficient space is not available to print these in full, but in this and succeeding issues will appear abstracts of many of them.—Editor.

#### 1. Low Pressure Regulator

- a. The three different inlet conditions which regulators may be set for:
- (1) Propane inlet pressure usually 100 psi.
- (2) In some cases, a first stage regulator is used to reduce the container pressure to some intermediate pressure in the vicinity of 10 to 15 psi, which is then fed to the low pressure regulator.
- (3) When using butane or butanepropane mixtures, the inlet pressure will have some intermediate value between the settings above—usually set at 50 psi.
- b. It is essential that a bug screen be provided in the vent opening of regulator to preclude the entrance of insects which might cause stoppage.
- c. It is important that the regulator be of sufficient capacity to carry the present, as well as any anticipated, appliance load.

#### 2. High Pressure Regulators

a. Not ordinarily provided with an integral relief valve, so a suitable separate relief valve should therefore be provided in the line beyond the regulator.



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Attendants at the Tulsa "U" Short Course in September had one evening of banqueting and fun at the Hotel Tulsa. Hopkins Photography.

#### Manifolds

For the purpose of providing a valve which will permit changing from one cylinder to the other.

- 1. Tee Block. Shuts off the opening so that the empty cylinder can be disconnected and a full one installed in its place without interrupting the flow of gas to the appliances, and with no danger of the gas escaping while the change is made.
- 2. Manual Type. More easily understood by the consumer, as there is a visual indication, by means of an arrow imprinted in the manifold handle, as to the cylinder from which gas is being withdrawn.
- 3. Automatic Throwover Type. Only attention required by the consumer is to an indicator needle on a pressure gauge, which points to the reserve tank (red) when one cylinder is empty.

#### Shut-off Valves

- 1. Diaphragm Type. More desirable for use than packed type valve, which washes out in time because of the highly solvent properties of LP-Gas.
- a. Because a large proportion of regulator trouble can be traced to the introduction of dirt, scale, or other foreign material from the cylinder valve outlet when it is connected to the system, the serviceman should always make certain that the outlet is free of foreign matter before the pigtail connection is made.
- Cash-and-Carry Valve. Intended primarily for use with portable containers with a capacity of 20 lbs. of LP-Gas.
- Glove and Angle Valves. For use in bulk plants and on large containers.

#### HANDBOOK BUTANE-PROPANE GASES

#### **REVISED JUNE, 1947**

- Up-to-date technical facts on LP-Gases.
- 352 Pages. Illustrated with Charts. Diagrams and Photographs.



#### Check this partial list of contents.

#### INTRODUCTION

The Progress of the Industry and the History of its Development.

The ABC of LP-Gas, an Introduction to LP-Gas Operations.

#### PHYSICAL AND CHEMICAL PROPERTIES

Properties of the Hydrocarbons in LP-Gas. Properties of Butane-Propane Mixtures Volume Correction Factors Analytical Determination and Testing

#### PRODUCTION OF LP-GAS

Natural Gasoline Plants, Recycling Plants, Oil Refineries

#### TRANSPORTATION AND STORAGE

Delivery by Truck, Rail, Water, and Pipe Lines Storage Tank & Pressure Vessel Design Liquid Metering and Pumping Systems

#### UTILIZATION OF LP-GAS

Comparative Performance with other Fuels
Appliance Installation and Testing
Domestic Applications
Commercial Applications
Industrial Applications
Enrichment, Peak Load and Standby Uses
A Fuel for Internal Combustion Engines

#### DISTRIBUTION OF LP-GAS

Installing and Servicing LP-Gas Systems Semi-Bulk Systems Bottled Gas Systems Gas Utility Service from Central Plants Multiple Utility Service from a Central

#### REGULATIONS

N.B.F.U. Pamphlet No. 58 (1947). Motor Carrier Regulations Freight Regulations Unloading Tank Cars Marine Regulations

#### APPENDIX

Products Liability Insurance
Handy Tables for Field Use
The Interchangeability of Other
Fuel Gases with Natural Gases
Flame Weeding
Bibliography
Glossary of Terms

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#### Relief Valves

Used to prevent the accumulation of dangerous pressures in a container, relief valves may be supplemented by an added relief device—the fuse plug. The reason for this is to prevent a container in a fire from rupturing because of so-called "residual" pressures. A normal safety valve, where a fire continues until the liquid contents are exhausted, will close at the end of the last cycle and remain closed because there is no further vaporization of the liquid contents.

The residual pressure which then remains in the container is not dangerous under ordinary conditions, but with the fire playing on the container wall, the wall will start to weaken at the hottest point, and the residual pressure will bulge the wall into a blister at that point. The steel in the wall at the blister will draw out until the cylinder ruptures. The supplemental fuse plug, which relieves pressure entirely, precludes the possibility of a container explosion.

#### **Excess Flow Check Valves**

1. It should be remembered in connection with automatic excess flow check valves that unrestricted flow is always into the container, while the closing action of the check valve is always out of the tank.

2. It is also of utmost importance that each installation be checked upon completion by breaking the piping at the farthest point from the check valve to ascertain that the piping is large enough and unrestricted enough to permit the closing flow to pass through it so that the valve will close properly in case of an accidental break at this point.

#### **Automatic Cut-off Valves**

A low pressure automatic cut-off valve should be installed at each individual appliance to safeguard against accidents caused by temporary interruptions of the gas supply.

#### 1. Filler and Vapor Return Valves

a. Quick filler valves consist of a double back pressure check valve both of which permit flow of liquid into the container, but close immediately when the flow of liquid is stopped or reversed.

b. Special filler valves are available through which the container can be emptied of its liquid content by use of an unloading adapter.

2. Vapor return valves are similar in construction to the filler valves except that the lower portion consists of an excess flow check valve instead of a back pressure check valve.

#### Liquid Level Gauges

A common type is the float type gauge, which operates by magnetism to indicate the contents of a tank.

\*Condensed from a paper presented at the University of Tulsa LP-Gas Appliances Short Course, Sept. 3-5.

#### Two Districts and LPGA Board Meet in New Orleans Dec. 10

The South Central and South Eastern districts of the Liquefied Petroleum Gas Association are scheduled to meet at the St. Charles hotel, New Orleans, Dec. 10.

The committee on arrangements consists of: Louis Abramson, chairman; Selwyn Turner; C. W. Guy; Kenneth W. Koach; and W. G. Petty, Sr.

Following a recently established procedure, the Liquefied Petroleum Gas Association's board of directors will hold its second quarterly meeting at the same place on the two preceding days, Dec. 8-9, and will remain for attendance at the joint district meeting.

# What the Farm Market Means to Butane-Propane Dealers

NY consideration of farms, farming or farm market, must establish the past and the present before it can deal with the future. The past years have left an indelible mark on the present and the future in both a financial and psychological sense. Psychologically, the dark years of the depression, which saw farm incomes reduced to infinitesimal portions of the preceding bloom years, left a deep, permanent scar. This will always remain a stumbling block, preventing most farmers from over-speculation.

In a financial sense, the past six years, 1940 through 1946, have seen farm income go up and up and up. Costs have done exactly the same. However, the proportion of cost to profit has seen the former fall off and the latter increase. At the present time, farm savings are 120 billion dollars, a 300% increase over 1941. Farm indebtedness is down 2 billion dollars.

#### Fewer Farms, Larger Operations

The reason for the fall-off of cost in proportion to profit is we have fewer farms, but these are larger and more mechanized. Thus, the farm is at least a mass production unit, fit and willing to take its place alongside the factory in our scheme of life.

Farm income is up 35% over last year; land values at the end of 1946 were up 6½ billion to 58.6 billion dollars. Land values, however, are subject to fluctuation; the farm debt, which for this short period of time is up 160 million, is not subject to fluctuation.

Looking into the future, certain as-

By BOB JOHNSON\*
Pacific Rural Press, San Francisco

pects of the domestic market have a direct effect on the future; high prices of meat and poultry prevent farmers from raising these products, thus increasing shortages. Would you buy a calf at today's inflated costs if you knew you might not be able to sell the steer at the same price when fully grown?

Co-ops among farmers will certainly influence any future developments in the farm market. These are divided into two groups, the marketing co-ops and the selling co-ops. The latter group has little effect on prices, but the former will exert some pressure by controlling pools of products and by affecting in part, the selling price to processor and consumer. Mechanized farming will make great changes in any future farm situation by enabling the farmer to produce more for less.

Does the future look good for the farm? The answer is an unqualified yes! Regardless of what happens to finances on a world-wide basis, the supply of food has never equalled the demand.

All this means what to LP-Gas?

It is elementary that the farm market is the greatest market for this fuel.

1. Gas is the best fuel.

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News

<sup>\*</sup>Digest of paper delivered at Salt Lake City convention of Mountain, North Pacific and South Pacific Districts of LPGA Sept. 23.

2. Farms have no natural gas.

3. Nor do they have any restrictive legislation to prevent the installation of LP-Gas.

The farm market is the least known of all markets which LP-Gas has. It is a long-run proposition of small profits on small installations. Thus far it has never equalled the quick grab which could be made from commercial uses of the gas. Because of this, there has been little research into farm uses. And, because there was great prejudice, the market was not entered into in the way that it should have been.

The future for LP-Gas on farms is unlimited and there are many ways to secure this market. A man who has a small territory can cover the entire territory and approach each of his customers personally. Provided they have not purchased a substitute in the year or so that he spends doing this, he will stand a good chance of selling them LP-Gas.

Perhaps a faster way is to advertise. Advertise to the farmer. Tell him that you have superior merchandise; that it is possible to heat water and to run a tractor with the same type of fuel, that the same gas will shell walnuts and kill weeds; that here is a fuel that can do most anything and can do it better in 90% of the cases than any competing product.

#### Should Have National Theme

One dealer can't do this all by himself. Instead, the entire industry will have to hit upon a central theme and follow it all along the line. Take, for example, the theme, "Ask you city cousin what her choice is—." When people have a choice they choose gas in almost eight out of 10 cases. Why not tell the farmer this? Why not give him his choice?

The fight must begin high and must be carried through the smallest

and the least of all the dealers. If it is not, then I state openly and plainly, you will lose the farm market.

It's later than you think!.

In California, 93.3% of all the farms have electricity at this time. Here in Utah, some 75% have electricity. The overall picture is a 58% average for the United States. The farm press believes that the farmer is entitled to a choice between gas and electricity. We believe that there is room and a place for both of these on the farm. We believe they should compete for the farmers' business, for competition is the life blood of all industry.

There are far-sighted leaders here in the LP-Gas association who are ready, willing and able to lead the industry into this new market. This is but the dawn, the sun is rising in this industry, and we bid you all good morning and good hunting!

#### Pacific Tanks Co. Opens Northwest Office in Portland

Pacific Tanks Co., of Los Angeles, announces the opening of an office and warehouse in Portland, Oregon. A complete line of Pacific tanks will be available from this Northwest office which will serve the area including Oregon, Washington, Idaho, part of Montana and British Columbia.

J. C. Duncan will be in charge of the Portland office, serving in the capacity of manager. Mr. Duncan will also represent the Anco Manufacturing and Supply Co., of Tulsa, Okla, in that area. The Anco organization offers a complete line of LP-Gas appliances and equipment to the industry.

Mr. Duncan has been an employe of Pacific Tanks Co. for more than two years. During this time he has served as manager of the Los Angeles office.

#### "STAGGERED" COOKING TOP

# Spaciously Hers

One of many forceful ROPER sales tools, the "Staggered" cooking top accommodates four large utensils at one time... eliminates reach-over and reach-around...helps keep utensil handles cool. This unique top burner arrangement is exclusive with ROPER, "America's Finest Gas Range".



NOVEMBER - 1947

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News

#### Gas Men Prepare Model Appliance Code

THE third in a series of meetings aimed at the formulation of an installation code for heating appliances

using LP-Gas was held in Los Angeles on Oct. 17.

Sponsoring this move for a recognized national code is the Heating Division, Manufacturers Section, of the Pacific Coast Gas Association. In attendance, at the meeting were representatives of the Pacific Coast



R. O. MONTRIEF

Gas Association and the Liquefied Petroleum Gas Association.

The group directly responsible for the formulation of the code consists of a committee appointed by L. M. Hull, chairman of PCGA's Heating Division section. R. O. Montrief, of the Ward Heater Co., has presided as chairman.

Speaking for the committee, Mr. Montrief stated that the move started by their section, under the auspices of PCGA, is an effort to prepare a code which will be acceptable to the various interested groups connected with the liquefied petroleum gas industry. He emphasized the fact that the committee desired at no time to foster a code that would be considered theirs alone. Instead, any work they do is considered preliminary. The results will go out to the various associations and other interested groups for criticism and change.

The desire for a recognized model code outlining regulations for the

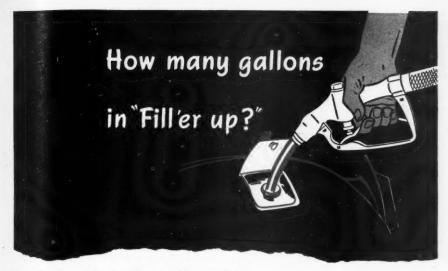
proper installation of LP-Gas heating equipment has been growing steadily. This fact was brought out by Art Theobald, of the Payne Furnace Co., who has done considerable work during past months in contacting groups in various states that are facing legislative changes.

Mr. Theobald pointed out that officials in many states are anxious to obtain just such a code as the committee is now formulating in order that they might be guided in the preparation of legislation governing LP-Gas dealers. These men, Mr. Theobald stated, recognize that the experience of men who have developed appliances, as well as the men who have been active in building the LP-Gas industry, is most vital when legislation is being planned. They are eager to obtain the results from the combined efforts of industry members.

#### Code Given State Commissioners

Thus far only the Texas Railroad Commission has received a copy of the preliminary code. Soon a copy of this code, with further revisions, will be sent to the New Mexico Commission. Mr. Theobald has been in close touch with this group and he states that they are anxious to obtain a copy of the code. Definite changes in the legislation governing the installation of LP-Gas heating equipment in New Mexico will be made and it is hoped that the code will be helpful.

Work on the code will continue under the auspices of PCGA for the present. However, immediate steps are being taken to obtain the active support and participation of every interested group throughout the country.



#### Don't Guess! Be Sure! Meter it! ...with a Neptune Red Seal Meter

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No matter what type of fuel you handle, guesswork can be a costly proposition. Why guess, when you can always be sure when a Neptune Red Seal Meter does the measuring? Then, too, your auditing department and the tax collector will accept these figures; but they wouldn't accept a "guesstimate."

Neptune Red Seal Meters are precision engineered, each being composed of several easily accessible units. Such simplicity means any necesary servicing can be done with ease and speed. And speaking of servicing did you know about...

#### NEPTUNE'S EXCLUSIVE MONEY-SAVING UNIT REPLACEMENT PLAN

Like any mechanical device Neptune Meters need occasional attention. So to make your investment completely satisfactory, we have a plan that permits you to exchange work-worn units for factory rebuilt replacements, at low cost. Adequate stocks of these parts are kept on hand at our strategically located branches and petroleum equipment jobbers' warehouses,

FOR ACCURATE MEASURING OF YOUR GALLONAGE.



THERE'S A NEPTUNE METER to fit every one of your bulk plant, tank truck and service station requirements. But no matter which type you select you can always be sure of getting "the measuring chamber with only 1 moving part," the piston. As can be seen by looking at the measuring chamber shown above, there are no valves or crankshafts to wear, piston rings to refit or piston leathers to replace. That's why Neptune Red Seal Meters have earned such a wide reputation for sustained accuracy.

#### NEDTUNE RED SEAL METERS

NEPTUNE METER COMPANY, 50 West 50th Street, New York 20, N. Y. Branch offices in: Atlanta
Boston • Chicago • Dallas • Denver • Kansas City, Mo. • Los Angeles • Louisville • Philadelphia
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Boston • Chicago • Dallas • NEPTUNE METERS, LTD., Long Branch, Ont., Canada
Portland, Ore. • San Francisco

#### THE TRADE

Formation of a new concern in the field of automatic controls, known as Robertshaw-Fulton Controls Co.,

through the merger of Robertshaw Thermostat Co., Youngwood, Pa.; Fulton Syphon Co., Knoxville, Tenn., and Bridge port Thermostat Con., is announced by John A. Robertshaw, president of the new firm.

The organiza-



J. A. ROBERTSHAW

tion of the company culminates a series of mergers combining five long-established companies, each a wholly owned subsidiary of Reynolds Metal Co. Two others included in the new set-up in addition

included in the new set-up in addition to those merged, are American Thermometer Co., St. Louis, and Grayson Heat Control, Ltd., Lynwood, Calif.

The officers, besides Mr. Robertshaw, are R. S. Reynolds, chairman; J. V. Geisler, executive vice president; T. T. Arden, executive vice president; R. S. Reynolds, Jr., financial vice president; Walter H. Steffler, secretary and treasurer, and Walter L. Rice, general counsel.

The directors include Mr. Reynolds, Mr. Robertshaw, Mr. Geisler, Mr. Arden, R. S. Reynolds, Jr., C. N. Mynderse, and Thomas F. Staley.

Mr. Robertshaw said that the purpose of the merger is to integrate the development, manufacture and

merchandising of a complete line of automatic controls for household, automotive, industrial and commercial use.

Lukens Steel Co., Coatesville, Pa., held an open house Sept. 11, followed by a dinner at the Coatesville Country Club so that its friends and customers might inspect the company's plants.

Robert W. Wolcott, president of the company, acted as host.

The death of Floyd K. Lawson, executive vice president and treasurer of the Geo. D. Roper Corp., occurred

recently at West Yellowstone, Mont. He had left Rockford, Ill., planning a brief western trip.

Recently Mr.
Lawson had completed his 30th
year of continuous service with
Roper. For some
time he had also
acted as an executive officer of
the Blackhawk



FLOYD LAWSON

Engineering Co., Roper subsidiary.

Widely known throughout the gas industry, Mr. Lawson held membership in the American, Mid-West, New England, and Wisconsin Gas associations.

He was a member of the Gild of Ancient Supplers, an honorary national association of the gas industry for men who have spent over 10 years in the sale and promotion of gas appliances and equipment.

During the war, Mr. Lawson was appointed a member of the important domestic cooking and heating stove manufacturers industry advisory board of the office of price administration.

Cribben and Sexton Co. announces the appointment of Dr. Frederick Port as production superintendant. Dr. Port succeeds Fred Doering, who has been directing the manufacture of Universal gas ranges for the company since 1943.

In January, 1946, Dr. Port joined Cribben and Sexton Co. as chief engineer and remained in this capacity until his recent appointment.

L. C. Roney, Inc., Inglewood, Calif., manufacturers of LP-Gas fittings, have just announced the appointment

of Harold L. Norway as their chief engineer.

Mr. Norway graduated from Case School of Applied Science (now Case Institute of Technology) in 1923 with a B.S. degree in Mechanical Engineering. Since graduation he has been em-



H. L. NORWAY

ployed by the Commonwealth Edison Co., Underwriters' Laboratories, Inc., and the Bastian-Blessing Co.—all Chicago concerns. His 13 years with the Underwriters' Laboratories Inc., were spent investigating equipment designed for safety and the last few years were spent principally on LP-Gas equipment and systems. Since 1939 he has been designing and developing LP-Gas equipment.

His activity on the LPGA technical and standards committee made it possible for him to become acquainted with many LP-Gas operators from all parts of the country. This experience should be of great value in his new position, as he knows the requirements that must be met to develop and produce equipment that will meet both safety and customer requirements.

The appointment of Lewis W. Selmeier as advertising manager has just been announced by Cecil M. Dunn, director of sales of the Estate Heatrola division, Noma Electric Corp. Mr. Selmeier was associated with the



L. W. SELMEIER

Estate organization, in advertising and sales, for six years prior to the war.

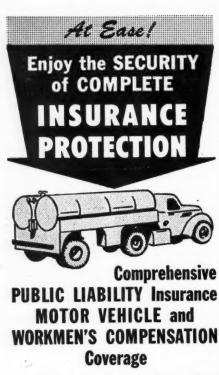
Mr. Selmeier will work with Mr. Dunn in executing the company's expanded advertising program for the sale of Estate gas ranges and Estate Heatrola space heaters.

Rheem Manufacturing Co. is introducing a new external publication, "Rheem Dealer News," the first issue of which is dated October, 1947.

The new magazine is circulated by direct mail to a list of more than 35,000 plumbing, heating equipment and household appliance wholesalers and dealers throughout the United States.

Editorial content includes information on company products such as water heaters for all fuels, space heaters, air cooling equipment, water softeners and central heating units

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Insurance covering all hazards for which the operator, distributor or dealer may be liable or assume under contract. Have your insurance agent write for free application blank, covering all questions to be answered in connection with the coverage you desire, or request it direct. No obligation.

#### LIQUEFIED PETROLEUM GAS INSURANCE UNDERWRITERS

Louis 74. Collar, MANAGER

OFFICE: 510 Insurance Exchange Bldg.; Kansas City 6, Mo., Phone, Victor 3563 HOME: 1913 Tauromee Ave., Kansas City 2, Kan. Phone, DRexel 3331 for oil, coal and gas. It also features dealer news, promotional aids, merchandising articles, personnel items and technical articles. The magazine will be published ten times a year.

John W. Kight has been named plant manager of the Lawson Manufacturing Co., Pittsburgh, makers of water and home heating appliances, firm officials announced recently.

Mr. Kight goes to Lawson from the vice presidency of the Rotogravure Engineering Co., Everett, Mass. A graduate of Lehigh University's engineering school, Mr. Kight entered the employ of the Carnegie Steel Co. upon his graduation from college. He served in both the metallurgical department and the industrial engineering department with Carnegie until 1936.

After working with the Owens-Illinois Can Co. until 1937, Kight became associated with Standard Oil and worked with various subsidiaries of that firm.

Southern Gas & Equipment Co. announces the opening of sales offices in the National Mutual building, Tulsa. The offices began doing business Sept. 1.

A new and interesting recipe book has been released by the Homemaker's Institute of Servel, Inc., the manufacturer of the gas refrigerator.

The first feature in the book is a section on nutrition which carries forward the extensive home nutrition program which Servel sponsored for the U.S. Department of Agriculture during the war. This nutrition section covers the seven basic food groups, and also includes a chart of how they should be stored in the refrigerator.

The second section is on the care and preparation of frozen foods. This

#### See What the LEADER Gives You

#### -In Control of Heat on the Hot Top

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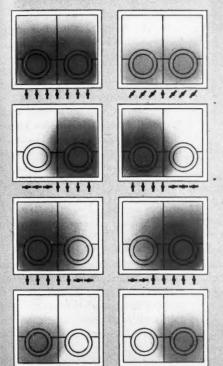
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This News Illustrated below are just a few of the heat variations which can be produced by the seven individually controlled Hot Top burners on the Garland.





Garland's amazing flexibility of heat control on the Hot Top gives the chef any heat he wants—where he wants it—when he wants it. He can prepare better cooked food. He can do it faster. He can save fuel. He can help reduce the cost per meal served. For greatest value it pays to choose the leader. Available for use with either butane or propane gas.

#### GARLAND,

THE TREND IS TO GAS

COMMERCIAL COOKING

HEAVY DUTY RANGES . RESTAURANT RANGES . BROILERS . DEEP FAT FRYERS . TOASTERS ROASTING OVENS . GRIDDLES . ALL TYPES OF COMMERCIAL COOKING EQUIPMENT

Products of Detroit-Michigan Stove Co., Detroit 31, Michigan



#### designed for 4" STUD WALLS

Ideal for apartments and small homes, Williams Wall Warmolators can be quickly installed in a standard 4-inch stud wall ... require no pit. They are also suited to cement block or slab construction, and second-story installations. Warmolators are vented . . . all products of combustion are carried off through 4-inch oval flue. Cast iron burners correctly designed for natural, manufactured, or liquified petroleum gas, give years of trouble-free service. These units are AGA approved and eligible for FHA loans. Any type of thermostatic control may be installed with the Warmolator.

Send for Literature.

#### WILLIAMS RADIATOR COMPANY

Sponsors of better heating since 1916

1821 FLOWER ST. • GLENDALE 1, CALIF.

section covers the nutritive values of frozen foods, how to store them, and an extensive coverage on their thawing and preparation.

The balance of the book is given over to recipes which are presented in a rather unusual fashion.

This book is being distributed free to all purchasers of the Servel gas refrigerator, and is available to anyone at 10c a copy.

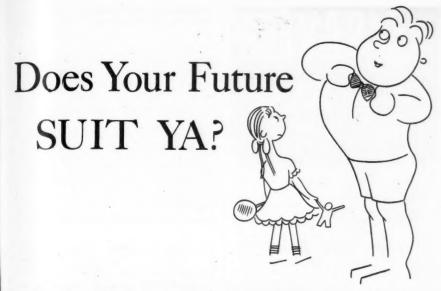
Selywn-Landers Co., Los Angeles, has appointed B. S. Sauter, who was chief engineer at L. C. Roney, Inc., Inglewood, Calif., until his recent resignation, to the position of assistant general manager.

Mr. Sauter was associated with the National Fire Underwriters Laboratories until a year ago and has also just been selected to head the California legislative committee of the LPGA. A committee will be formed by Mr. Sauter to prepare a model ordinance governing use of LP-Gas in municipalities. This will later be submitted to the national LPGA legislative committee, headed by Ken W. Rugh.

The new Selywn-Landers assistant general manager holds degrees in mechanical and aeronautical engineering from the University of Buffalo and Tri-State College.

Selwyn-Landers, in addition to manufacturing valves, fittings and other L-P accessories, distribute Parkhill-Wade hose nozzles, Fisher governors, J. Y. Tayor float type magnetic gauges and Lunkenheimer valves.

At the annual September election of officers of the Ruud Manufacturing Co., Pittsburgh, makers of automatic gas water heaters, K. M. Clark, formerly secretary and treasurer, was



The mass millions are carrying home more money in their pay envelopes than ever before. But zowiel the way food and clothing prices are sky-rocketing, spare cash is still scarce.

L.P.G. dealers are helping to keep their futures safe with gas ranges designed for a minimum of servicing on L.P.G. systems. That's where Welbilt will do the job to help make "your future suit ya". Every Welbilt range is planned and built for L.P.G. use.

Thrift is a great American habit and it's coming back in vogue. Today, as always, Welbilt offers the newest convenience features in a range which enables dealers to meet the demand for intrinsic value.

WELBILT STOVE CO., INC. Maspeth, L. I., N. Y.



NORE Welbilt Ranges are Being Delivered NOW!

NOVEMBER - 1947

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News



8 FEATURE REFRIGERATOR TRUCK

- All joints arcwelded.
- 12" General Tires with separate tubes.
- Roller or ball bearings.
- A Loops hold straps securely.
- Sweeping axle hangers aid climbing, etc.
- Extra brace supports axle.
- Roomy, strong 5" x 25" toeplate.
- secure.

loading, stair

Padded strips protect refrigerator, hold it

CYLINDER TRUCK

Designed Exclusively

L. P. Cylinders.

10" Pneumatic Tires. Weighs only 23 lbs.

ORDER FROM YOUR

DISTRIBUTOR NOW!



MOLLENBROCK And WILKE

WASHINGTON, MISSOURI

advanced to vice president and treasurer. W. M. Latta was elected secretarv.

Other officers re-elected were M. G. Hulme, chairman of the board; R. H. Lewis, president; J. H. Sorg, vice president and general counsel; M. M. Scott, vice president, and J. K. Roth. assistant secretary and treasurer.

The factory and general offices of the Specialities Appliance Corp., Chicago, have moved to a new location at 1220 West Van Buren St., Chicago.

These new quarters provide greater facilities for the manufacture of the complete specialty line of deep sea fryers, nut roasters and chip cookers.

Roberts & Mander Corp., Hatboro, Pa., makers of "Quality" appliances, has announced the appointment of W. B. Eckenhoff as sales manager, according to H. S. Minster, president.

Mr. Eckenhoff will exercise general supervision and direction of the company's sales and marketing program. and will have his headquarters at the home office in Hatboro. He succeeds John H. Emery, who died on Aug. 24.

Mr. Eckenhoff has been active in the sales organization of Roberts & Mander for over 13 years and was assistant sales manager for 8 years before his present appointment.

Richard E. Anderson has joined the sales force of Grand Home Appliance Co., Cleveland, according to an announcement made by S. C. Bernhardt, vice president of that organization.

Mr. Anderson has a background of sales consulting and market research work. Recently, he was a lecturer in the market and merchandising depart ment of Cleveland College division of Western Reserve university and, during the last war, served in the combat infantry, 5th Division, in the Euro pean theater of operations.

#### North Eastern District, LPGA. To Meet At Atlantic City

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The annual meeting of the North Eastern district of the Liquefied Petroleum Gas Association will be held at the Claridge hotel, Atlantic City, on Nov. 6-7.

The committee on arrangements is John Van Norden, chairman, Roy Forsberg, Fred W. Frost, Adam Johnstone, Sam Kapnek, Louis Seley, H. Emerson Thomas, Frank Boice, William Hauck, and Walter A. Naumer. Mr. Naumer is the LPGA director for the district and 1st vice president of the national association.

#### Green's Fuel Answers New Demand With Expansion

Increased demand for fuel gas service in the Orlando, Fla., area has necessitated an expansion program for the Natural Gas and Appliance Co., Inc., franchised dealer for Green's Fuel, in which an overall expenditure of \$300,000 is contemplated, according to an announcement Sept. 10 by E. Reed Whittle, president. The expansion program will include provision for increased storage facilities, service and delivery trucks, service and sales departments, it was revealed.

Warehouse and display facilities have been enlarged to accommodate new types of gas appliances. Natural Gas and Appliance Company, Inc., now has 46 employes and an annual payroll exceeding \$150,000. Since 1932, Whittle said, fuel gas has gained increased acceptance in Florida and four other

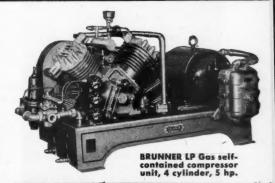
# OU LOSE 500 TO 1000 LBS. LP Gas in every tank car unloaded

...if you don't salvage residue vapor!

You pay for this residue vapor poundage and for its transportation! It cannot be recovered by an ordinary liquid pump, but it can be recovered with the Brunner LP Gas Unit, a compressor assembly that pumps volatile liquids and salages their residue vapor. Unloading, too, is peeded. When you buy a Brunner LP Gas Unit ou buy a pump that has world wide acceptance and is the best for the purpose, regardess of the price paid. The savings affected iquidate the investment in a short time. On any liquid petroleum handling problem consult:

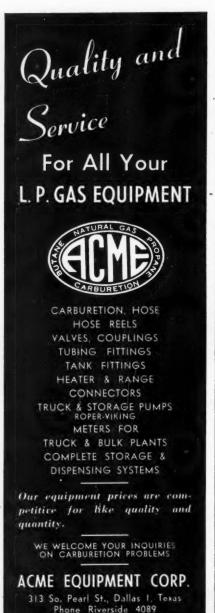
RUNNER MANUFACTURING CO. UTICA 1, NEW YORK, U.S. A.







It describes the Brunner LP Gas Unit and contains more illustrations, diagrams, tables and valuable information on the handling of LP Gas than any booklet ever issued.



Southeastern states because of its comparatively low cost.

Mr. Whittle emphasized in his announcement that earnings of the company remain in the community, since it is owned by the officers in active charge of its management, who are permanent residents. The officials, in addition to the president, include: Bill R. Conway, vice president and sales manager; Mrs. Helen Richter, secretary; Roland F. Holloway, vice president.





E. Q. BECKWITH

J. S. FEROE

#### Beacon Petroleum Co., Newly Organized, Will Market LP-Gas

Formation of the Beacon Petroleum Co., a new marketing company for natural gasoline and liquefied petroleum gas and its associated equipment, was announced Oct. 3 in Tulsa, Okla., by its four organizers, all prominently known in industry circles, following their resignations from Anchor Petroleum Co. and the Anco Manufacturing and Supply Co.

The new firm will be headed by E. Q. Beckwith, until his resignation manager of the LP-Gas procurement division of Anchor Petroleum Co., with J. S. Feroe, vice president; H. R.

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ASK FOR-INSIST ON-STANDARDIZE WITH



#### **BRASS FITTINGS and ACCESSORIES**

THE RECOMMENDED FITTING FOR L-P GAS
OIL INSTALLATIONS • PLUMBING • REFRIGERATION

Write for illustrated price list

#### SCHAAF BROS., INC.

OSBORN, OHIO

Jobbers in principal cities

# Butane & Propane E

Carter high quality Butane and Propane are unsurpassed as domestic and industrial fuels. Bulk loading points, St. Elmo, Illinois, Seminole and Stonewall, Oklahoma. Wholesale only. Your inquiries are solicited.

THE CARTER OIL COMPANY

NOVEMBER - 1947

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ment Co., H. R.

News

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The pump that does the job well, day in and day out, is the one that's a worker. The Viking, with its "Gear Within a Gear — 2 moving parts" principle, gives this type of service. Its rugged construction, without small, intricate parts, springs, gadgets, etc., gives it the long, dependable life expected of a good pump.

Viking rotary pumps are engineered for the job—to do the work assigned them. Ask for free folder 2300B today. Recommendations gladly given without obligation.







H. R. McFARLAND

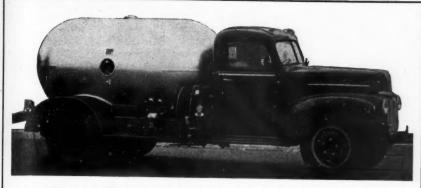
R. E. BOLINGER

McFarland, also formerly with Anchor, secretary; and R. E. Bolinger, until Oct. 3 the purchasing agent for Anco Manufacturing and Supply Co., treasurer.

Mr. Beckwith, until his association with Anchor a few months ago, had been engaged in engineering, sales and procurement activities for the Chemical Products Division of Phillips Petroleum Co. for more than 15 years. Mr. Feroe was formerly assistant to the president of Anchor and manager of the company's natural gasoline division. He joined the latter company following the sale of Hanlon-Buchanan, Inc., to the Warren Petroleum Corp., where he had been for 14 years as assistant to the head of that company's natural gasoline division.

Mr. McFarland is the son of R. S. McFarland, executive vice president of Seaboard Oil Co., New York, a substantial producer of natural gas and gasoline in Texas, as well as having large production interests in California, Arkansas, Louisiana and Illinois. Prior to his association with Anchor, as sales manager, he had been with Trinity Gas Corp. and Geophysical Service, Inc., both of Dallas.

Mr. Bolinger, prior to his affiliation with Anco, had been with Phillips Petroleum Co., Chemical Products Divi-



1000 net gallon LP-Gas delivery unit built for F. T. Carpenter of Phoenix, Arizona, by

#### SUPERIOR TANK & CONSTRUCTION CO.

6155 SOUTH EASTERN AVENUE

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News

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Have You Filled ALL Your Consumers' Storage?

This is the "Home Stretch" for winter supplies and better service.

CITIES SERVICE OIL CO.

THE EXPERIENCE

A DEPENDABLE SERVICE

#### Cities Service Oil Co.

(Delaware)

BARTLESVILLE, OKLA. CHICAGO, ILL.

Other Sales Offices

CLEVELAND KANSAS CITY
ST. PAUL TORONTO

sion, in the equipment department, and also had been manager of National Supply Co.'s store at Hays, Kan., and with United Petroleum Gas Co. of Minneapolis.

The new company will have its headquarters in Tulsa, according to Mr. Beckwith.

#### Prefabricated Steel Buildings

For LP-Gas dealers whose facilities are over-crowded by sudden expansion of business, the Armco Drainage & Metal Products Inc., Middletown, Ohio, has been furnishing buildings fabricated of steel panels which are quickly erected by unskilled labor.

Standard Armco steel buildings may also be dismantled and reassembled in other locations. They are easily wired, can be insulated, or may be left uninsulated. Weather-tight, allsteel construction includes door and window frames.

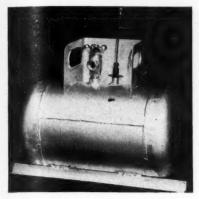
More than 45 installations have been sold to LP-Gas men in the southeast. The Rulane Gas Co., Charlotte, N. C., has purchased 16 "Steelox" buildings, 8'x8'x8' in size, for use as pump houses as well as five 18x60x10 ft., all-purpose units, eight 10'8"x12"x10', and two 12'x16'x10' buildings.

The buildings are manufactured in several sizes with various combinations of standard windows; sliding, swinging, and unfolding doors; ventilators, and so forth. The Carolina Butane Gas Co., Columbia, S. C., has purchased several "Steelox" buildings measuring 24'x60'x8'.

Among other LP-Gas concerns using the structures are the Suburban Gas Co., Montgomery, Ala., and the Consumers Gas Co., Albany, Ga.

In addition to the Middletown, Ohio, headquarters of the company, branch offices and factories are located in Atlanta, Ga.; Jacksonville, Fla.; Raleigh, N. C., and Montgomery, Ala.

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Write for complete details
Patent Pending

#### The Universal Dual Purpose Gauge Checks In An Instant

The new Universal combination gauge and 10% valve offers for the first time a gauging device that allows customers to check the amount of fuel in small tanks—easily and quickly. It saves many man hours of your drivers time, eliminates empty tanks and dissatisfied customers.

It's inexpensive . . . Simple to install . . . Fits any tank equipped with standard brass 10% valve opening. Retail Price \$2.95.

The Universal gauge is also available as standard equipment in Manchester Tanks. They are installed at the factory ready for immediate delivery.

#### MANCHESTER WELDING and FABRICATING CO.

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#### GOOD DESIGN AND THE RIGHT MATERIALS



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Built-in Quality—a combination of good design and the right materials PLUS modern equipment and methods, skilled workmen and careful supervision—assures safety and endurance in underground and aboveground propane storage tanks fabricated by DOWNINGTOWN Iron Works. Inc.

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	2,000		402
Infra-Ray—Vented I	2,000	BTU	402V
Circulating Heaters		Cat.	No.
The Twenty-five-Unvented . 2	5,000	BTU	201
The Twenty-five-Vented 2	5,000	BTU	201V
The Twelve-Unvented I	2,000	BTU	199
The Twelve-Vented	2.000	BTU	199V
The Ten-Unvented	0.000	RTII	190

#### BIEN AIR CONDITIONING CO.

362 W. Garvey, Monterey Park, Calif.



Illustrated is the Bien Infra-Ray Heater—40,000 BTU. This radically different heater heats by projecting a beam of infra-red rays to the "living level" of the room. It brings the warmth directly to your body. Dimensions: 25" high, 26" wide, 121/2" deep.





GAS EQUIPMENT SUPPLY CO

127 ELLIS ST. N. E.

ATLANTA, GA.

#### What Gas-Powered Engines Mean to Farms

By O. D. HALL

A N era of more general use of LP-Gas fuels in mechanized equipment on the farms, has dawned, with the slackening of difficulties which barred expansion along that line during the war and immediate postwar period, B. C. Robinson, Jr., American Liquid Gas Corp., Los Angeles, told delegates to the recent Oklahoma LP-Gas Association convention at Oklahoma City.

In a room where LP-Gas operated engines, carburetors and testing equipment were liberally displayed, Mr. Robinson, assisted by Busby Carroll and J. H. Greer, both of the Wichita Engineering Co., Wichita Falls, Texas, conducted a carburetion clinic in which operation of equipment, such as is used particularly in power operations on the farms and truck lines, was demonstrated.

Mr. Robinson reported that not only are engine factories installing LP-Gas mixers and converters as original equipment, but that several manufacturers are making engines specifically to utilize butane-propane fuel at its natural high efficiency. They are designing high compression and turbulence into their combustion chambers to provide oversize, cool intake manifolds, and put efficient margin into their bearings and cooling systems to take care of the extra power inherent to the fuel. He stated that three of the big farm implement manufacturing companies are joining the firms already putting out such engines. Approximately one-third of their new



#### COFFEE URNS

● Because "Tri-Saver" eliminates urn bags and filter paper — your customer gets increased operating efficiency and a perfect coffee brew. At the same time, you step up your LP-gas load. America's No. 1 coffee urn — favored by leading food-serving establishments — is all stainless steel and burnoutproof. Sell nationally-advertised "Tri-Saver" urns — to build volume, reputation and profits for you.





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# PARKHILL-WADE Manufactures for the LP-Gas Industry

- Metered Dispensers
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- Portable Bottling Plants



L.P.G. DIVISION

#### PARKHILL-WADE

Consulting & Construction Engineers

5017 E. Anaheim-Telegraph Road Los Angeles, California tractors are coming out with LP-Gas engines.

Some outstanding examples of saving accomplished by using this fuel in argicultural and trucking operations were cited by Mr. Robinson.

Carey Cocke, Jr., Jonestown, Miss., who farms 6000 acres of cotton land, recently converted 18 farm tractors from gasoline to LP-Gas. As a result he reported to Mr. Robinson that he was saving \$1.50 per day on cost of fuel, alone, without taking into account substantial savings on maintenance of equipment.

The representatives of the Wichita Engineering Co., who were present, reported that their firm is saving from \$800 to \$900 a week on LP-Gas fueling of 10 trucks as compared to cost of gasoline.

He reported that LP-Gas fuel dispensing stations are rapidly becoming more numerous. For example, there are now 50 such stations between Los Angeles and San Francisco. Simple equipment is available so that farmers may draw fuel for their tractors directly from their own LP-Gas storage tanks on their premises and that most new parts for tractors and other equipment operating on LP-Gas are readily available.

"LP-Gas carburetion in agriculture as well as in other fields is here and dealers and distributors might as well get ready now to meet the situation before regular farm implement dealers generally add LP-Gas service and equipment to their operations. Some already have entered this field," Mr. Robinson said.

Tri-County Gas Co. of Russellville, Mo., capitalization \$10,000. Incorporators: Herbert A. Tampke, O. F. Stubinger, Virginia Stubinger, Ben Stevens, L. A. B. Leslie and Cliff G. Scruggs.

#### TWO FINE, NEW "MODERNAIRE" CIRCULATOR HEATERS



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#### RADIANT CIRCULATOR

Model 101 RC

5 Radiants Stainless Steel Hearth

CIRCULATOR

Model 101 C

Baked brown enamel finish, chrome trim and nameplate.

20,000 B. T. U. rating.

Height, 18 inches. Width, 19 inches. Depth, 81/4 inches.

Heating Capacity, 2,000 Cubic Feet Air Space 0 to 70 degrees. Stainless Steel Burner.

3/8-inch Pipe-size gas inlet.

22 gauge steel jacket, spot welded construction.

Shipping weight: Approximately 16 lbs., Model 101 C; approximately 19 lbs., Model 101 RC. Packed in individual cardboard cartons.

When ordering, specify whether for Butane-Propane or Natural Gas.

AGA approved tor Butane-Propane

Available For Early Delivery.

For further information, prices, and discounts, write to

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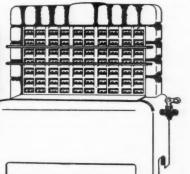
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Exceptional value. Has heavy heat-reflecting refractory backwall. Fitted five (2-in-1) Venetian radiants of full-glow type. Has high-efficiency, non-clog burner, quickaction valve and precision adjustments. Rigid steel base finished in two-tone lyory, durable and washable.

#### BRILLIANT FIRE Radiant Heater



WRITE FOR NEW BRILLIANT FIRE CATALOG NO. 47



THE OHIO FOUNDRY & MANUFACTURING CO.

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#### John Jones\* Is Typical

of the men who are coming to NATIONAL LP-GAS INSTI-TUTE every month.

He wanted to improve himself in installation, service, and sales practices and methods. He studied and worked hard, and is now doing a fine job for Smith's Butane-Propane Service.\*

Other men who want to insure themselves of increased earning capacity can do the same.

LP-Gas distributors who want better trained and more efficient employees can have them.

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A 30-day intensive training course for those with proper background in "math", mechanical ability and experience in LP-Gas or related industry.

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Both courses provide valuable laboratory and testing work.

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Also a Home Study Course covering the same subjects for those desiring on-the-job training.

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\*Actual Names Furnished on Request

# GAS RANGES AHEAD OF ELECTRIC $2\frac{1}{2}$ to 1

The gas industry gained 7,100,000 cooking customers from 1935 to 1947 despite war-time restrictions which prevailed for five of the 11 years of this period, according to the Gas Appliance Manufacturers Association,

Better than 90% of homes on piped gas lines use gas for cooking; 62% of homes in United States cook with either piped gas or with L-P-Gas.

This is a 45% increase over the 15,752,000 homes which cooked with gas in 1935 and brings to 22,900,000 the number of homes in the United States using gas ranges.

During the same 11-year period, 2,800,000 additional families purchased electric ranges and brought

# NUMBER OF HOMES USING GAS AND ELECTRIC RANGES MILLIONS 24 1935 THROUGH 1946 1935 1941 1946



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Hays has worked closely with LP-Gas Engineers, to design and produce a complete line of stops and fittings for every installation need, for use with flared tubing. Couplings are included, no other fittings or adapters are necessary.

Illustrated are No. 7665 Floor Stop. ideal for temporary disconnections, with adjustable flange, and with or without cap and chain, \%" or \%" tubing (o.d. sizes); and No. 9500 Copper to Female I.P. Stove Elbow, %" or 1/2" tubing (o.d. sizes) x 34" iron pipe.

Send us your requirements, for complete information and specifications.

Write for NEW LP-Gas Folder 101

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Immediate Delivery \$8.90-\$10.75



**SPECIFICATIONS . . .** 20 lb. (5 gal.) I.C.C. 4-B240—Gauge 3/16"—O.D. Width 14", Height 17"-P.O.L. & 10% valve-Set relief 375 lbs.-Low center of gravity-Stabilized safety factor.

NET FRICES: \$8.90 equipped with 10% valve, minus P.O.L. valve. \$10.75 equipped with P.O.L. and 10% valve. F.O.B. Los Angeles.

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63 years of Peerless research in the Science of Heating and its allied problems of Engineering, Design, Styling and Finish has resulted in today's outstanding quality heating equipment.

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MANUFACTURING CORPORATION Incorporated LOUISVILLE, KENTUCKY

the total number of electric cooking customers to 4,000,000.

Rural LP-Gas cooking customers total 3,500,000 and have increased more than 600% since 1935. The number of electric range installations in rural territories totals 1,785,000.

#### ICC Authorizes Change for LP-Gas Winter Shipments

Continuing its previous practice. ICC will authorize shipment of LP-Gas during the coming winter season in 104A and 104A-W cars contingent upon limitation of vapor pressures, according to a recent LPGA bulletin. Permits must be obtained from Homer C. Krug, Director of Bureau of Service, ICC, Washington 25, D. C.

During November and in the period March 16 to April 15, pressure must not exceed 92 lbs. p.s.i. at 105° F. From Dec. 1 through March 15, pressure must not exceed 110 lbs. p.s.i. at 105° F.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., RE-QUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of BUTANE-PROPANE News, published monthly at Los Angeles, California, for October 1, 1947.

State of California, County of Los Angeles

Before me, a notary public in and for the Sefore me, a notary public in and for the State and county aforesaid, personally appeared Jay Jenkins, who, having been duly sworn according to law, deposes and says that he is the publisher of the BUTANE-PROPANE News, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper the circulation) of the foresaid. paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Jay Jenkins, 1709 W. 8th St., Los Angeles 14, Calif.: Editor, Lynn C. Denny, 1709 W. 8th St., Los Angeles 14. Calif.

2. That the owner is: (If owned by a cor-



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#### NOW AVAILABLE FOR IMMEDIATE DELIVERY

Propane Under and Above Ground Butane Underground

222 Gallon capacity 200 lb. W. P. 330 """"" 500 """""" 250 gallon capacity 101 lb. W. P. plus 15% Corrosion Allowance 410 gallon capacity 101 lb. W. P. plus 15% Corrosion Allowance

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Owing to the shortage of seven league boots,
— Quip our fast delivery service boy has stocked up on magic carpets—
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GAS EQUIPMENT COMPANY, Inc.

P. O. BOX 566 2620 South Ervay « DALLAS, TEXAS



NOVEMBER - 1947

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The New DIX unit offers the finest in modern carburetion for the conversion of trucks, tractors and stationary engines to LP-Gas. Start now, dur-ing winter months, to sell your customers on the superiority of your fuel -and for better performance recommend DIX equipment.

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EVERY SIZE AND CAPACITY

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Jenkins Publications, Inc., 1709 W. 8th St., Los Angeles, Calif.; Jay Jenkins, Helene Jen-kins, James E. Jenkins, Eloise Jenkins, 1709 W. 8th St., Los Angeles, Calif.

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JAY JENKINS (Signature of Publisher) Sworn to and subscribed before me this 16th day of October, 1947. SUSAN McCONNELL.

[Seal] (My commission expires June 4, 1951.)

#### Krug to Address Annual API Meeting in Chicago

J. A. Krug, Secretary of the Interior, will be among distinguished speakers at the 27th annual meeting of the American Petroleum Institute in Chicago, Nov. 10-13, according to William R. Boyd, Jr., president. The Stevens hotel is the place.



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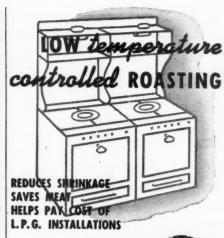


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#### Deep-Fat Frying at Its Best

- ★ Customers can serve a wider variety of fried foods.
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WILL PAY \$20,000.00 OR MORE FOR healthy bottled gas business with future. Complete details first letter please. Box 500, BUTANE-PROPANE News, 1709 W. 8th St., Los Angeles 14. Calif.

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FOR SALE—AN LP-GAS AND APPLIANCE business located in Rocky Mt. area, 70,000 gallon bulk storage. Five delivery trucks in excellent condition. One transport trailer. Retail approx. one million gallons of LP-gas per year. Gross business last year \$360,000.00. It will take \$150,000.00 to handle this. Balance on terms. Write in care of Box 495, Bu-TANE-PROPANE News, 1709 W. 8th St., Los Angeles 14, Calif.

FOR SALE—INDEPENDENT LIQUEFIED Petroleum Gas and Appliance Business, well established, franchises covering three counties. All assets, plants, equipment, merchandise. Price \$100,000. Amador Realty Company, Jackson, Calif.

AGENTS WANTED TO REPRESENT NAtional distributor of bottled gas water heating and home heating appliances. Contact appliance outlets. Liberal, attractive proposition. Desirable areas open. Write National Appliances, Inc., 260 Shady Ave., Pittsburgh, Pa.

FOR SALE—IN SOUTHERN NEW ENGland—Bottle gas and bulk gas business with 600 accounts. Storage and filling station on railroad siding. One 1500 gallon transport,

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#### EQUIPMENT WANTED

WANTED—NATURAL OR LIQUEFIED PEtroleum Gas Appliances—especially ranges and refrigerators—gas or electric (open type), Sales and service, Northwestern Kansas, CON-RAD DISTRIBUTORS, Gaylord, Kansas,

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FOR SALE—IMMEDIATE DELIVERY! EUreka Smokehouse Burner Assemblies! For meat smokehouses using bottled gas. Completely automatic. Clean, filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive booklet. Eureka Equipment Co., P.O. Box 396, Beloit, Wis.

FOR SALE—TANKS, FITTINGS FOR IMMEdiate delivery; 150 gallon Butane tanks and fittings, also 250 and 500 gallon Propane tanks and fittings. For delivery in 30 days—750 gallon and 1000 gallon Propane tanks and fittings. Kenney Tanks Installation Co., 2132 No. Halstead St., Chicago 14, Ill.

PUMPS FOR IMMEDIATE SHIPMENT—WE have a good stock of the following type of pumps: 2" Roper Propane Truck Pumps, 2" Peerless Gear Type Rotary Truck Pumps similar to Viking 90 gallon, 2" Yale & Towne Rotary Truck Pumps, 2x2½" Corken Bulk Plant Pumps with 3 & 5 HP, 3 phase explosive proof motors, 2½" Peerless Bulk Plant Pumps with Motors, 1½x¾" Peerless Bottle Filling Pumps with single phase motors. Lubbock Machine Co., Lubbock, Texas.

WHOLESALE—IMMEDIATE DELIVERY ON Flaron Brass Fittings. Complete line. Tools, tubing accessories, good prices. Write SCHAAF BROS., INC., OSBORN, OHIO.

FOR SALE—BUTANE TANKER. CHEVRO-let 1940—11/2 ton truck tractor with approxi-mately 2000 net gallon 125 lb. W.P. Tank on Semi Trailer, 750-20 tires, Eaton rear axle, power take off pump drive, all in good condi-tion, \$2000.00. Ransome Company, 916 North B St., Sacramento, Calif. Phone Sacramento 2,5538.

CYLINDERS-NEW AND USED-BOUGHT CYLINDERS—NEW AND USED—BOUGHT and sold—Clearing house for all types cylinders, Propane, Butane, 20 lb., 100 lb., 50 gal. to 15,000 gal. List your surplus cylinders with us. State the size, ICC marking, quantity, and price wanted. No obligation. List your wants in new and used cylinders. Every shipment guaranteed as represented. In stock now 100 lb, capacity ICC-4B-240 Propane cylinders light weight. HQME GAS EQUIPMENT COMPANY, 1836 East 23rd Street, Cleveland 14, Ohio. SUperior 5719. Ohio. SUperior 5719.

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FOR SALE -- IMMEDIATE DELIVERY ON FOR SALE—IMMEDIATE DELIVERY ON ICC 4B240 100 pound propane cylinders, \$22.75 at Clarksfield, Ohio. 60 and 20 pound ICC cylinders. %" copper tubing 5½ to 9. Northern Ohio Bottled Gas Supply Co. Phone 915 Clarksfield, Ohio. Mailing address, Wakeman, Ohio.

FOR HIRE—PROPANE OR BUTANE transport 4792 water gallons, Texas haul preferred. Almost new equipment. Write Box 425, Butane-Propane News, 1709 W. 8th St., Los Angeles 14. Calif.

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- EXPERIENCED PERSONNEL
- SCARCE EQUIPMENT
- A NEW PLANT
- A BUYER
- BUSINESS OPPORTUNITIES

A Classified Ad in Butane-Propane News will get fast action at only 15c per word.

Closing Date—10th previous month

#### **BUTANE-PROPANE News**

1709 W. Eighth Street Los Angeles 14, Calif.





"when it's an Armstrong ... depend on it . . . it's the finest of its kind"

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clean, dry heat. Brown vitreous enamel finish. 173/4" high, 20,000 or 24,000 B.T.U.

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ARMSTRONG PRODUCTS CO. Quality Since 1899 Dept. BP

Huntington 12, W. Va.

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... keep flames properly centered and secondary air under control.

SUPPLIED IN ASSEMBLIES WITH MOUNTING CAGE OR MOUNTING CAGE AND COMBUSTION BLOCK

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Ace Hose Reel Co., Ltd.       186         Acme Appliance Manufacturing Co.       79         Acme Equipment Corp.       170         AGI-Gas Corp.       20         American Meter Co.       10, 11         American Pipe and Steel Corp.       25-         American Stove Co.       94         Anchor Petroleum Co.       17         Anco Manufacturing & Supply Co.       37         Anderson Brass Co.       186         Armstrong Products Co.       191         Autoweld Corporation       185
Bastian-Blessing Co., The
Caloric Stove Corp.       82, 83         Carter Oil Co., The       171         Century Gas Equipment Co.       146         Cities Service Oil Co.       174         Coleman Co., Inc., The       136         Commercial Shearing & Stamping Co.       187         Cribben & Sexton Co.       121
Day & Night Manufacturing Co.         127           Dearborn Stove Co.         139           Delta Tank Manufacturing Co., Inc.         183           Detroit-Michigan Stove Co.         165           Dickerson Manufacturing Co.         188           Dix Manufacturing Co.         184           Downingtown Iron Works         175           Dresser Industries, Inc.         127, 191
Electric & Carburetor Engineering Co.         144           Ellis Manifold Co.         186           Empire Stove Co.         117           Ensign Carburetor Co.         143           Ever-Tite Coupling Co., Inc.         188
F & E         Manufacturing Co.         187           Fisher         Governor         Co.         31           Folsom         106         106           Fraser         155
Gas Equipment Co., Inc.         .176, 183           General Controls         48           Gillette Stove Corp.         151           Grayson Controls         111
Harman Pump Co.       36         Harper-Wyman Co.       41         Hays Manufacturing Co.       181         Hewitt-Robins, Inc.       84         Hoof Co., C. M.       186         Hudson Manufacturing Co., H. D. 22, 23
Inland Steel Container Co 44 International Metal Products Co 12
Kansas City Brass Co

Leggitt Co., S. H.       189         L.P.G. Insurance Underwriters       164         Lubbock Machine Co., Inc.       - 16         Lukens Steel Co.       24
Mallinckrodt Chemical Works         187           Manchester Welding & Fabricating Co         175           Master Tank & Welding Co.         34           McNamar Boiler & Tank Co.         30           Midland Parts & Bearings Co.         188           Mitchell Co., John E.         33           Moellenbrock & Wilke.         168           Monroe Stove Co.         118           Mutual Liquid Gas Equipment Co., Inc. 40
National Gas Equipment Co.         179           National L-P Gas Institute.         180           Neptune Meter Co.         161
Ohio Foundry & Manufacturing Co 179 O'Keefe & Merritt Co 86
Parkhill-Wade
Radiator Specialty Co.         98           Ransome Co., The.         38           Reliance Regulator Corp.         93           Reznor Manufacturing Co.         156           Rheem Manufacturing Co.         185           R. M. S. Products Co.         181           Robertshaw Thermostat Co.         189           Roney, Inc., L. C.         89           Roper Corp., Geo. D. (Pumps)         81           Roper Corp., Geo. D. (Ranges)         159
atoper corps, deer or (manger, correction
Scaife Co.
Scaife Co.         Front Cover           Schaaf Bros., Inc.         171           Schoenberger Co., The W. J.         35           Selwyn-Landers Co.         21           Servel, Inc.         8, 9           Sinclair Prairie Oil Co.         26           Smith Corp., A. O. (Gas Tanks)         4, 5           Smith Corp., A. O. (Water Heaters)         149           Smith Precision Products Co.         17           Southland Steel Co., Inc.         28           Specialities Appliance Corp.         102           Sprague Meter Co., The.         27           Stampings, Inc.         101           Superior Tank & Construction Co.         173           Superior Valve & Fittings Co.         42           Tappan Stove Co., The.         128           Taylor Sales, Inc.         91           Tennessee Enamel Manufacturing Co.         124           Thomas Truck & Caster Co.         188           Trageser Copper Works, Inc., Fourth Cover
Scaife Co.   Front Cover
Scaife Co



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